JPRS 77665

25 March 1981

China Report

ECONOMIC AFFAIRS

No. 123

FBIS FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available from Bell & Howell, Old Mansfield Road, Wooster, Ohio 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS 77665

25 March 1981

CHINA REPORT

ECONOMIC AFFAIRS

No. 123

CONTENTS

NATIONAL POLICY AND ISSUES

Measures To Improve Population Quality Outlined
(Zhang Chunyuan; JINGJI KEXUE, 20 Nov 80)........................ 1

PRC Journal on Productive, Nonproductive Labor
(Zhang Jitao, Xia Xingyuan; JINGJI YANJIU, 20 Dec 80)........... 13

Fixing Output Quotas for Households Examined
(Wang Guichen, Wei Daonan; JINGJI YANJIU, 20 Jan 81)............ 21

ECONOMIC PLANNING

Brigade, Commune Enterprises Show Steady Growth
(SICHUAN RIBAO, 14 Jan 81)....................................... 31

Economic Journal on Managerial System
(Zhou Muchang; JINGJI GUANLI, 15 Jan 81)......................... 33

Briefs

Anhui Enterprise Management Seminar 38

FINANCE AND BANKING

Sichuan Savings Up 400 Million Yuan in 1980
(SICHUAN RIBAO, 22 Jan 81)....................................... 39

Briefs

Hunan Currency Control 40
Nei Monggol Commercial Tax Rates 40
Tianjin Bank Loans 40
Shanghai Bank Loans 41
Zhejiang Coin Shortage 41
Fujian Credit Service 41

ENERGY

Petroleum Products Said Just as Precious as Food
(Liu Zhongxian; LIAONING RIBAO, 5 Jan 81)........................ 42

Briefs

Yunnan County Hydroelectricity 46
Heilongjiang Thermal Powerplant 46
Hunan Power Industry 46
Liaoning Transmission Line 46
Jiangxi City Energy 47
Xinjiang Fuel Conservation 47
Sichuan Coal 47
Henan Electricity Conference 47

MINERAL RESOURCES

Shandong Gold Production Increases 29 Percent Over 1979
(Zhang Xueren; DAZHONG RIBAO, 22 Jan 81)........................ 48

INDUSTRY

Jiangsu Industry Achieved Steady Growth Last Year
(Jing Changyan; XINHUA RIBAO, 24 Jan 81)........................ 50

Advances in Industry, Transportation in 1980 Outlined
(Jin Zhongyi; CHING-CHI TAO-PAO, 28 Jan 81).................... 52

Industrial Enterprises Urged To Learn From Shanghai
(XINHUA, 12 Mar 81)... 59

Briefs

Guangdong Industry 60
Ningxia Industry Forum 60
Guangdong Light, Textile Conference 60
Heilongjiang Industrial Conference 61
Shandong Light Industry 61
Shaanxi Light Industry Conference 61
Guangdong Industrial Production 61
Xian Economic Improvement 62
Shandong Textile Industry 62
Hubei Quality Regulations 62

CONSTRUCTION

Briefs

Housing Construction, Development Company 63
Chengdu Capital Construction Suspension 63
Guizhou Capital Construction Tightening 63
Henan Capital Construction Conference 63
Beijing New Housing 64
Hubei Capital Construction Conference 64

FOREIGN TRADE

Briefs

Kunming-Hong Kong Trade 65
Liaoning Export Diversion 65
Light Industry Fair 65
Zhejiang Export Trade Port 65

LABOR AND WAGES

Hiring Retirees at Higher Wages Needs Study
(Li Zhixian, et al.; ZHONGGUO CAIMAO BAO, 13 Jan 81).......... 66

Briefs

Shanghai Trade Unions 68

TRANSPORTATION

'GONGLU' Carries Views on Modernization of Highways
(GONGLU, 25 Jul 80).. 69

Role in Economy, by Liu Dayuan
Study of Road Types, by Zhang Zuyin

Building of Qinghai-Xizang Railway Underway
(Wang Mingkui; TIEDAO ZHISHI, Nov 80).......................... 80

Briefs

Guangdong Shipping 84

GENERAL

Briefs

National Insurance Company Conference 85
Yunnan Economic Conference 85

NATIONAL POLICY AND ISSUES

MEASURES TO IMPROVE POPULATION QUALITY OUTLINED

Beijing JINGJI KEXUE [ECONOMIC SCIENCE] in Chinese No 4, 20 Nov 80 pp 1 - 7

[Article by Zhang Chunyuan [1728 4783 0337], Beijing University: "Improve Population Quality; Hasten Progress of Four Modernizations"]

[Text] 1. Determinants of Population Quality

The determinants of population quality are themselves determined by the peculiarities of contradictions inherent within the population itself. These determinants of qualities inherent in the population itself make man not only different from other animals, but distinguish him from all other organisms, and make of him an animal of a high order developed by nature and by society over a long period of time that is able to transform both nature and society. The peculiar contradictions that exist within society itself have many facets; thus they have determined that the determinants of population quality are not singular but multi-faceted, having both natural elements and social elements. Study of the determinants of these qualities possesses major significance in any exploration of the problem of improving population quality.

We know that mankind with his advanced nervous system is the outcome of long development in the organic realm. In terms of the physiology of the population, the numerous special contradictions of the human body (such as the beating of the heart, the circulation of the blood, synthesis and decomposition of material, changes in protein and nucleic acid, the metabolism of substances, and the transformation of energy) have determined man's natural attribute, and have formed the quality of the human body. With regard to the quality of the human body, it is whether or not development has been sound, whether the intellect is complete, whether physical strength is great or small, whether the constitution is strong or weak, whether stamina is good or bad, and agility in movement, which are most important and fundamental, while differences in a person's race, blood group, sex, skin color, and blood type are secondary, and not fundamental. Marxists judge the quality of the human body on the basis of the former rather than the latter. Those who judge population quality on the basis of skin color or race, or suppose the Anglo-Saxons or Germanic peoples to be a superior race, and hold the view that they should be vigorously developed while other races should be done away with are guilty of bourgeois race prejudices for which there is no foundation.

Man is not only the outcome of longterm organic development, but a social animal as well. In the process of the transformation from primitive ape to man, man's mental activity not only drew on the primary signalling system that humans and animals share for direct arousal of conditioned reflexes to outside stimuli, but also constructed language, which is peculiar to man, for a second signalling system for the arousal of conditioned reflexes. This brought the depth and breadth of man's conditioned reflexes to an advanced stage unmatched by animals. In the process of his development, man went through several hundred thousand endless years, but once he learned to make tools for production, the paw of the ancient apes became the hand of man, and the action of the ancient apes became the productive labor of man. The animal that could only passively adapt to the natural world became mankind who could consciously and purposefully transform nature. The basic activities of mankind are productive activities, and production has always meant social production. Through his collective association, and in activities to conquer nature and transform society, man has developed consciousness, has exchanged ideas, has accumulated knowledge, and has mastered skills to form the social attributes that characterize man himself. These social attributes of man developed as human society developed. These social attributes of man have meant a breaking away from the basic traits of the animal world, and they are also the principal mark of distinction between man and other animals.

Man's social attributes have demonstrated important human qualities in two ways. In one way they have demonstrated man's scientific and cultural qualities. Man's mental qualities include mainly an outlook on life, a moral outlook, the quality of ideas and traditional habits. Though the content of these things has differed in different historical periods of society, satisfying the individual class natures of societies that have classes, nevertheless, they have always molded the major aspects of the determinants of human qualities for the particular society of any given epoch. Cultural and scientific qualities include mainly cultural knowledge, the levels of science and technology, as well as production skills and experiences. This represents the crystallization of knowledge accumulated over a long period of time by man in understanding and transforming nature and society. It is mankind's own gradually formed ability to understand and transform the world. In this, the level of science and technology in the quality of culture and science occupies a particularly prominent position, and conveys a striking continuity. Only when a person fully carries on the scientific accomplishments of predecessors and has the courage to create the new can he have attainments. Even though the quality of human culture and science differs in different ages and is different in individual countries, nevertheless, human beings are always creatures possessed of a definite cultural and scientific quality, and cultural and scientific qualities as a major ingredient of the determinants of population quality are the same.

From the above it can be seen that man is a complex creature with life, feelings, thoughts, knowledge, and creativity. He is both a product of nature, and a product of society who possesses not only natural attributes, but also social attributes. Man's attributes are manifestations of the qualities inherent in man himself. Even though man's own qualities are varied, still his principal and fundamental qualities are nothing more than physical qualities, mental qualities, and cultural and scientific qualities. So-called quality of population is, in fact, the knowledge, and the qualifications, and capacities for transforming the world that man possesses. The high or low quality of human population that people frequently talk about is, in fact, whether the knowledge and qualifications to transform the world that man himself possesses is good or bad, or his capabilities to do so high or low. So-called improvements in the quality of population are actually improvements in man's own knowledge and his qualifications and capabilities to transform the world.

The qualities of human bodies, mental qualities and cultural and scientific qualities are at once separate and related. They organically exist in a living human form. Physical qualities are the natural conditions and foundations for population quality. They are the principal marks of the highness and lowness of population quality. Elevation of human mental qualities or cultural and scientific qualities help in the elevation of physical qualities, and elevation of human physical qualities provides superior conditions for strengthening mental qualities and social and scientific qualities. Comrade Mao Zedong pointed out the educational program of, "An educated person should be developed in his moral education, intellectual education, and physical education to become a cultured worker with a socialist consciousness." The objective is to improve the overall quality of the population of the Chinese race, and to buttress the understanding and the qualifications and capabilities to change the world of the Chinese people.

Population quality is subject to the restrictions of diverse natural and social elements. Biological laws play a role, and social laws play a role in the state of human physical qualities. Human mental qualities and cultural and scientific qualities, in particular, are under the control of social laws. In terms of the quality of the entire population, biological laws by no means play the major decisive role, because the material conditions that these biological laws require to play their role are determined by society's production modes. The reason why population quality and its development is principally under control of social laws is, at bottom, determined by the production modes of society and their development.

2. Realization of the Four Modernizations Requires Elevation of Population Quality

The state of population quality is formed under conditions of a certain level of productivity, and conversely it exerts profound influence upon the development and productivity. All advanced production techniques, and such high levels of productivity are obtained from a population of a certain particular quality. People who have not mastered modern science and technology do not have the productivity for highspeed development. Consequently, planned, step by step elevation of population quality commensurate with progress in the four modernizations is an absolute necessity in China's four modernizations, and whether this can be accomplished has become the key to success or failure for the four modernizations.

First of all, realization of the four modernizations requires constant strengthening of the physical qualities of the people. Since Liberation, accompanying the development of the socialist revolution and construction under the correct leadership of the party has been great improvement in the material standard of living of the Chinese people. Medical and health conditions have been striking improvements; some contagious and hereditary diseases have been brought under control; some localized illnesses in border and mountain areas have been prevented or controlled; the broad masses of working people have gained initial betterment of their working, living, and proliferating conditions; physical conditions have rapidly improved, the people have become full of vim and vigor, and their physical strength has increased. As a result, the death rate for China's population has sharply declined from the 28 per thousand prior to Liberation, to 6.2 per thousand in 1979. Average life expectancy has become longer, increasing from around 40 years of age before Liberation to 68 years of age in 1979 for males, and 70 for females. Development of children and young people is good with increases in body weight and height. Representative survey data from Beijing show that the following average heights for 17 year old students: 1.662 meters in 1954; 1.694 meters in 1965; and 1.729 meters in 1979. In a 25 year period, heights increased by 6.7 centimeters for an average of 2.68 centimeters every 10 years. Nationally, teenagers showed an increased height of about 1.5 centimeters every 10 years. The healthy, strong, and vigorous Chinese race has stood up. The insulting epithet, "sick man of East Asia" has been cast aside forever. This is the result of our arduous struggle led by the party, and a concrete manifestation of the superiority of the socialist system. However, as compared with requirements of the four modernizations, and as compared with developed nations of the world, the state of population quality in China requires further improvement.

Realization of the four modernizations will require a physically healthy and mentally fit army of workers numbering hundreds of millions for coordinated combat. But in our existing population there are still a certain number of incompletely developed, physically deformed, mentally retarded, and stupid, dull-witted defectives. Pertinent representative survey data reveal that in Shanghai municipality, defectives amounted to 1.026 percent of the population. In Xiongerzhai Commune in Pinggu County, Beijing, defectives numbered 14.03 percent of the population. In Shuobei Commune, Datong County, Qinghai Province, defectives totaled 12.08 percent of total population, and in Hexi Commune in Guide County, they accounted for 10.04 percent of the population. A national estimate would be no less than 5 per thousand, I fear. These 5 million defectives have, in one degree or another, lost their capacity to work and to provide for their own livelihood to become burdens on their families and on society. In addition, the number of the deaf, the dumb, the blind, those suffering from high blood pressure, those affected with coronary disease, those affected with nervous disorders, the diabetics, and the asthmatics are also considerable. These people are not only one reason for the decline in the quality of China's population, but are a direct contradiction in requirements of the four modernizations and become a passive element in accelerating the four modernizations.

Realization of the four modernizations objectively requires ability to fully develop intelligence and to provide improved physical quality for the people. Every worker now at work or preparing to work must redouble efforts to master modern science and technology to meet the needs of the four modernizations, taking full advantage of and making fullest use of his own intelligence, ability, and wisdom to make a greater contribution to the four modernizations, for which purpose it is necessary to prepare commensurate natural conditions and foundations. Currently, the physical quality of most people will not pass the test, and this poses a rather great contradiction with requirements for development of the four modernizations. At the same time, the current work style in China is basically hand operations with a fairly high intensity of labor requiring a fair amount of physical strength to do. But even if in the future when machine production gradually takes theplace of hand labor, though the intensity of labor will diminish, still the amount of stamina and consumption of energy will greatly increase.

All this requires that people's physical quality gradually increases the four modernizations progress. Rational and ample nutrition is a material requirement for assuring gradual improvement in physical quality. A moderate amount of medical and health facilities are also indispensable. Currently, however, the dietary standards of the broad masses of the people are very low, and the required carbon and nitrates are strongly felt to be inadequate. A great gap exists between medical and health conditions and actual needs, and some rural villages still lack medical care and medicines. Not only is the gap great between our present circumstances and those of economically advanced countries, they are even greatly lower than average world levels. In the United States, annual per capita consumption of beef, pork, and lamb is 193.8 pounds; 270 eggs, 540 pounds of dairy products, and 130 jin of grain. In China, however, average per capita consumption of grain was only 398 jin, of oil 3 jin and 3 liang, and somewhat more than 10 jin of meat. In some rural villages, even the amount of grain for consumption is insufficient, requiring substitution of melons and vegetables. The calories and nutrients derived from such animal and plant foods can scarcely fully make up for the expenditures of energy and strength required for hard labor, and thus improvement in the physical qualities of people is adversely affected. This state of affairs is in sharp contradiction to the development of production, particularly to the requirements of the four modernizations. Unless it is promptly solved, it must inevitably hinder the smooth development of the four modernizations.

Second, realization of the four modernizations requires constant improvements in the mental quality of people. Common sense tells us the four modernizations will be realized by people, that people have a mentality, and that the mentality of people controls their actions. Therefore, the state of people's mentality will directly affect the real progress of the four modernizations.

The nub of people's mental quality is their outlook on life and their moral outlook. The requirements of socialist modernizations and the goals of human life under socialism -- to live for the happiness of the majority of the people -- are compatible with his, and promote our own development. The moral outlook of socialism and the socialist outlook on life are interlinked, and are also the major constituent part of mental quality. In the process of carrying forward socialism, we must adhere to socialist orientation, vigorously propagandize and foster communist virtue, and particularly train our young people to become a new generation of man possessed of communist virtue and the fine qualities of the proletariat.

Furthermore, realization of the four modernizations requires vigorous elevation of the cultural and scientific and technical qualities of man. This is the principal means for accelerating the four modernizations.

Today our foremost objective in carrying out the four modernizations is the high-speed development of social productivity, and the development of productivity has its own inherent laws. We know that in order to conquer nature, men need both physical strength and mental capabilities. During the infancy of the human race, conquest of nature depended mostly on physical strength, and tools that extended the organs of work only played a minuscule role. Along with the accumulation of practical experience in production, the development of the intellect and the fabrication of more complex tools, the human intellect and its materialization played an increasingly greater role in production.

The advent of modern science in the 18th century, the invention of the steam engine, and the use of electric power caused the function of all the key elements in production to undergo further changes, with new tools and new sources of power becoming the principal elements in the increase of productivity. And modern science, which was the crystallization of long term development of human intellect as well as its application to production, came to form the major determinant force in the development of today's production. The advanced implements of production and equipment that play a determining role in production were invented and fabricated from people possessing a correspondingly high degree of cultural and scientific qualities. Consequently, any country seeking after highspeed development of productivity had to master advanced scientific techniques, and in order to do this, it had to increase the cultural and scientific quality of its people. This was determined by the law of the growth of productivity itself, and was early attested as a historical fact in the development of social production.

The enhancement of people's cultural and scientific qualities, and thus the development of science and technology, not only directly determines reforms in the implements of production, but also leads to great changes in the objects of labor. The appearance of the space industry allowed mankind to use satellites to perform tasks in communications, weather reporting, and prospecting for resources with greatly increased efficiency. Development of energy science has provided us with solar power generating stations in space, controlled nuclear fusion power generating stations, and compressed air power stations. The development of electronic technology has not only produced a revolution in industrial production, but has also greatly increased the labor productivity rate in agriculture. Treated with man made electricity, soil fertility is greatly increased for two or three fold increases in output. Use of microwave equipment (such as the American zebo [3419 3134] type) can bring a 35 to 60 percent improvement in the elimination of weeds and insect pests. Use of electronic methods in prospecting for subterranean water can increase work efficiency by 21 times. Development of materials science has already increased the materials that may be used from several thousand kinds to between 200,000 and 300,000 kinds, and synthetic materials are coming to occupy an ever more important position. One synthetic fiber plant with an annual output of 10,000 tons equals the output of 250,000 mu of cottonfields. One synthetic rubber plant with an annual output of 45,000 tons equals the output of 450,000 mu of rubber plantations. However, such modernized standards of productivity derive from the high degree of people's cultural and scientific qualities, such modernized science and technology is impossible, and thus there can be no such high levels of productivity.

Increase in cultural and scientific qualities of people, with attendant development of sceince and technology, both provides the modernized production process with the experience workers necessary to operate advanced production equipment, and provides huge enterprises with the fine management personnel who are versed in scientific and technical knowledge and who have multifaceted management skills.

Moreover, the skills and degree of proficiency of workers, and the level and competence of managers is of vast importance for the rate of labor productivity. In carrying out the four modernizations, we need large numbers of proficient workers and highly skilled managers of enterprises. This, in turn, requires that in the process of the four modernizations, there be constant improvements in cultural and scientific quality to provide a steady stream of such talent for the rapid development of productivity.

In sum, in carrying out the four modernizations, we must possess the most advanced modern science and technology. We must improve our implements of production, using modern production equipment to replace old and antiquated production methods. We must transform the composition of raw materials used, providing more of the new synthetic materials. We must do a good job of administration and management, increase the rate of labor productivity, etc.... All of this can be done only if the cultural and scientific qualities of people are improved.

Enhancement of the cultural and scientific quality of people depends mostly on development of educational endeavors. During the 30 years since Liberation, a fundamental transformation has occured in this situation, with great increase in the cultural and scientific quality of the broad masses of the people. In the 30-year period 1949 to 1979, student enrollment in institutions of higher learning has increased from 117,000 to 1.02 million for a 8.7 fold increase. Enrollments in technical secondary schools has grown from 1,039,000 to 59.05 million for a 56.8 fold increase. Primary school enrollment has grown from 24.39 million to 146.63 million, for a more than 6 fold increase. The rate of school age children entering school has risen from around 20 percent before Liberation to 96 percent. That such a high speed of development could have occurred in the very short space of 30 years is astounding. However, looked at in terms of a large socialist country such as China and in terms of the requirements of the four modernizations today, this transformation in education, and this increase in the cultural and scientific quality of the people still falls far short, and there is need for continued vigorous development and improvement.

A great gap exists at the present time between China's educational endeavors and those of advanced nations, and many problems also exist in them, which seriously impair the improvement in the cultural and scientific quality of the people, and which sharply conflict with real progress in socialist four modernizations. These are revealed mainly in: (1) No real universal primary school education. At the present time, China has about 15 percent illiteracy, and primary school education is also very backward. Ostensibly 96 percent of all children enter school, but actually only 60 percent complete five years, and only 30 percent graduate from primary school. The 150 million illiterates, and the multitude of workers who have less than a primary school education must inevitably impair smooth progress in the four modernizations. A survey done in Yunxi Commune in Shifeng County, Sichuan Province shows that of 141 cadres at the branch secretary or production team leader level or above throughout the commune, seven were illiterate; 116 had a primary school education; 17 had a junior middle school education; and only one had a senior middle school education. If the cultural and scientific quality of rural village cadres is in such a shape, imagine what the quality of ordinary commune members is like. How could such a situation be anything but a drag on the four modernizations?

(2) Secondary education is antiquated and its structure is irrational. Twelve percent of China's primary school graduates are unfit to enter junior middle school, while in Japan only 1 percent of primary school graduates are unfit to enter junior middle school. Fifty percent of China's junior middle school graduates are unfit to enter senior middle school, while in Japan only [illegible] percent of junior middle school graduates cannot make it into senior middle school. China's secondary educational structure is irrational, with too much emphasis going to secondary education and not enough going to secondary technical education. During the past 30 years, a total of only [illegible] million middle rank technicians have been trained for the country, and the proportion of high to intermediate technicians is imbalanced, [illegible] impairment of the technical level of workers on the job, and blocking real progress in the four modernizations. (3) Higher education is even more antiquated. Only 3 percent of China's senior middle school graduates enter college, while in Japan 40 to [illegible] percent do. In Japan, with a population of somewhat more than 100 million, each year [illegible] college graduates become workers in industrial plants. Currently the ratio of students in school to total population is 10 per 10,000 in China, while it is 456.4 per 10,000 in the United States, [illegible] per 10,000 in Canada, 183.3 per 10,000 in Japan, 187 per 10,000 in the USSR, and 156.8 per 10,000 in Yugoslavia. Even in India it is 37.3 per 10,000 or 3.7 times more than in China. After hours adult education is even weaker. In China today 76.93 million people are workers in enterprises owned by all the people, and in these ranks there is a universal "three lows and one lack," by which is meant that the cultural level is low, technical qualifications are low, management level is low, and technicians are lacking. According to statistics from some areas, employees possessing an education from an institution of higher learning amount to between only 3 and 5 percent; those with a senior middle school education account for 10 percent; those with a primary middle school education and lower account for 80 percent, and illiterates account for about 5 percent. Of these groups, technicians number only about 4 percent, and even in Shanghai it is only 5.7 percent. Very clearly such a labor corps can scarcely be expected to meet the needs of the four modernizations, and after hours education is urgently needed to improve it. However, China's adult education programs for workers are very antiquated. In 1976, expenditures for after hours education nationwide averaged less than 0.02 yuan per person, and in 1979 total enrollment in after hours university courses of all kinds was only 860,000 people. Meanwhile, in 1978 in the United States, more than 18 million people were engaged in after hours advanced studies, and more than three-fourths of the country's 2,900 institutions of higher learning had adult education plans. China's antiquated situation cannot help but impair existing cultural and scientific quality of workers, and impede improvement in their scientific and technical level.

In short, the socialist four modernizations requires constant improvement in people's physical quality, mental quality, and cultural and scientific quality. The four modernizations will be realized in the process of constant improvement of population quality. In this sense, without extremely great improvements in the quality of China's population, there can be no four modernizations of China. Therefore, just as we give strong attention to economic construction, so must we give strong attention to the issue of population quality and take in hand improvements in population quality in the same way that we take in hand the four modernizations.

3. Principal Ways to improve Population Quality

Improvements of population quality is an extremely complex matter. The quality of population is itself determined by diverse factors. The ways and means of improving population quality must also be limited by the various factors that determine population quality. Consequently it is not possible to discuss here in a comprehensive way all the problems involved in improving population quality, rather only the main ways can be discussed in a somewhat gross and shallow way.

Improvements in population quality must have as their foundation the growth of social productivity. Social productivity is the major factor influencing popultion qualtiy. The greater the growth in social productivity, the higher the quality of population. Therefore, in order to improve the quality of China's population, it is necessary to strive, first of all, for growth in China's productivity so as to be able to create all the necessary material conditions for improving population quality. Despite the current relatively low level of productivity in China, insofar as capacity to carry economic burdens permits, we must devote to the maximum extent possible manpower, material and financial resources for improvement in population quality. This is a matter about which we should think deeply and plan carefully, and that possesses strategic significance.

In the improvement of population quality, it is necessary to give attention to prompt readjustment to any links in production relationships that are not compatible with productivity. If growth of productivity is provided the possibility for improving population quality, to a great extent the transformation of these possibilities into realities will be decided by production relationships. Production relationships have a huge direct effect upon the state of population quality. Under specific conditions of productivity levels, just how newly created social wealth will be divided into proportions for accumulation funds, and consumption funds, and how consumption funds will be further shared are decided by production relationships and the various policies embodying their needs. Such distributions form existing social consumption levels and individual consumption levels, and they directly affect the state population quality. In China, as a result of the disturbance and destruction caused by the "leftist" line of Lin Biao and the "gang of four," for a long time consumption funds were excessively low and accumulation funds were excessively high in an irrational situation. This both seriously impeded improvements in population quality, and was unfavorable for rapid growth of production. Continued readjustment must be made in this irrational proportion of disbursements. The abnormal situation in which wages paid to mental workers are lower than those paid to physical workers, and whereby remuneration for complex work is less than for simple labor kills economic motivation for people to study cultural and scientific knowledge, and seriously hampers improvement in population quality.

Increase in quality of population requires control over increase in quantity of population. Population quality and quantity are the unity of opposites; the two are mutually related and mutually restrictive. Control of the quantity of population helps quality of population, and improvement in the quality of population can promote a decrease in the quantity of population. China's economy is antiquated; its population numerous, its base large, and its growth rate high.

Planned births to control the quantity of population and reduce the natural rate of increase of the population holds especially great significance for increasing the quality of population. A reduction in the natural rate of population growth both helps in promoting improvements in the physical quality of the people and helps improve the cultural and scientific quality of the entire people. It can also provide an [illegible] foundation for improving the quality of the population. Thus, given China's conditions, control of quantity of population and reducing the natural growth rate of the population is the most important way of improving the quality of the population.

Improvement in the quality of population also requires mass control over hereditary illnesses and the handling of matters in accordance with the laws revealed in eugenics. China has numerous types of hereditary illnesses, possibly more than 2,000 kinds. With such illnesses, people can transmit bad genes to succeeding generations, which can result in congenital cretinism and deformities, which must inevitably result in sadness for the individual itself, and increase the burden on society, or even endanger the destiny of the entire Chinese race. Consequently, we cannot simply lightly dismiss such hereditary illnesses, or regard them as unimportant. Instead, it is necessary to vigorously launch a study of eugenics and adopt effective measures to halt their spread. To this end, we must: (1) Use genetic laws to diagnose the amniotic fluid in advance of birth to discover chromosome impairment and metabolic abnormalities, determining whether the unborn child suffers from hereditary illnesses, terminating pregnancies at an early stage to prevent congenitally retarded and deformed unborn children from entering the world. The incidence of congenital abnormalities in unborn children is currently on the rise. According to a survey conducted by a certain Beijing hospital, in 1978 it was 10.01 percent; in 1979, it was 17.06 percent; and from January to May 1980, it reached 22.08 percent. Under such circumstances, vigorous promotion of diagnosis of the amniotic fluid before birth possesses particularly great significance for improvement in the physical qualities of the population. (2) Concern for the well-being of future generations and the health and prosperity of the Chinese race requires strict institution of a system of premarital checks so that males and females who carry genetic illnesses, congenital idiocy, or low mental capabilities, may marry but not reproduce, with varying degrees of punishment being meted out to offenders. (3) Forbidding of marriages between close relatives. Both the experiences of people and a large volume of case histories have shown that when people with close blood ties marry, some genetic materials that can cause illnesses may combine, and there are many opportunities for recessive genes that cause illness. Chances that descendants of such couples will carry genetic illnesses are four times greater than for normal people.

Improvement in the quality of population requires better work in mother and child care to reduce the infant mortality rate and to protect the health of mother and child. To this end, (1) there should be more propaganda and education on hygiene and health care during pregnancies so that attention will be given to environmental sanitation, and prevention of virus infections to avoid impediments to the intelligence of the child. Pregnant mothers should be extremely careful in taking medicine in order to avoid causing deformities in the fetus from improper use of medicine. Repeated miscarriages should be properly handled. Generally speaking, no special measures should be taken to maintain a pregnancy so as to avoid the birth of mentally retarded and deformed children. (2) Improvement in medical care in the immediate pre- and post-natal period. Generally speaking, the death rate is quite high in the immediate pre- and post-natal period. The hospital that is affiliated with the Tianjin Medical Academy had a 35.5 percent mortality rate during the pre- and post-natal period in 19,970 confinement cases between 1969-1978. Because of the long process of birth, pressure exerted on the brain of the fetus and the long period of oxygen deprivation caused quite a number of cases of post-natal retardation. Thus, attention to medical care during the immediate pre- and post-natal period has major significance in reducing the infant mortality rate and in improving the physical quality of the population. (3) Intensification of child care reduces to the lowest minimum the incidence of post-nataly retarded children. In China, quite a few dull-witted children have been caused by complications resulting from encephalitis, poliomyelitis, measles, cramps, and high fevers, which were improperly treated. According to a survey conducted in the Luxiang residential neighborhood in Nanshi District, Shanghai, this had been the cause for 54.9 percent of the retarded people. Therefore, action to safeguard and develop the physical strength and mental capacity of children is of very great significance in improving the quality of population. (4) In China, both the materials and the techniques for mother and child care are very poor. Pediatric and gynecological hospitals are too few in number, the number of beds few, doctors scant, and equipment poor, all of which seriously damages attainment of the goal of "one born, one living, and one growing strong." China has more than 300 million children, yet is has only 19,000 pediatricians, or an average of one pediatrician for every 15,800 children, while in western European nations, the ratio is one pediatrician for eveyr 800 to 1,000 children. In China, there is, on average, only one hospital bed for every 500 people, while in Norway and Sweden, there is one hospital bed for every 70 people. This backward situation seriously impairs improvements in the physical quality of the population and is in urgent need of earliest possible change.

Improvements in population quality requires strengthening of education in the revolutionary outlook on life and the communist ethical outlook in a vigorous advocacy of carrying on and developing the noble ethical qualities and fine revolutionary traditions of China's working people, and particularly of the proletarian revolutionary martyrs, resistance to feudal ideology, bourgeois ideology, and the corrosive influence of their degenerate ways of life, wide ranging launching of a movement of learning from model heroes in order to train young people to be an idealistic, ambitious, devoted, courageous, cultured, well-mannered, arduously patriotic, and arduously socialist loving new generation of lofty character and morals. It is proposed that classes in Marxist theory be set up in a planned way throughout colleges, middle schools,and primary schools for the systematic education of students in communist ethics with special emphasis on the communist view of life, education in patriotism, education in collectivism, education in fervent love for labor, and education in individual moral character.

Improvement in population quality requires a good job in education. To make education a most important element in economic growth requires increases in investment in education. In the wake of World War II, countries throughout the world placed extreme emphasis on investment in education, feeling that this was an investment for very high returns. Speed of growth was very fast, and it constituted a substantial part of gross national product. In China, however, expenditures for education were small, and their proportion of gross national product was also very low. For example, education expenditures as a proportion of gross national product in 1975 amounted to 6.2 percent in the United States, 5.5 percent in Japan, 5.7 percent in Egypt, and 2.8 percent in India. The 1978 proportion for China was 1.12 percent. Likewise in terms of per capita expenditures for education, China's showing was also lower. In 1975, the United States spent a per capita $471.42, Japan $247.74, Egypt $18.01, and India $3.94, while in 1978 China spent $2.74 per capita. Average expenditures for education in the United States are 172 that of China. This state of affairs seriously affects development of education in our country, obstructs improvements in population quality, and is not favorable to the four modernizations. In addition, only by destroying the old convention of resident study as the only form for higher education in a broadening of educational avenues, and the adoption of multiple forms of providing education can more qualified personnel be produced, can they be turned out faster, and can they be turned out earlier. In addition to the continued vigorous development of full-time university education, it is necessary to arouse the enthusiasm of all quarters for operating a two-shift system and a non-resident system in university education as well as active expansion of television universities, of the size and scope of correspondence universities and night universities and, insofar as conditions permit, to operate universities for the children of workers and staff members using funds contributed by the workers and staff members themselves, with everyone with the same qualifications as determined by testing being treated in the same way. Under present circumstances when we are unable to develop large scale, universal full time higher education, numerous other forms of providing education seem to possess extremely great importance. Furthermore, technical secondary schools have the advantages of requiring little investment, rapid construction, and a short training period for students, and offer an important means for training medium level personnel with specialized training that provides more, faster, better, and more economically. In order to meet the needs of the four modernizations for all sorts of specialists, secondary technical education must be vigorously developed to increase the proportion of medium level specialists in the technical ranks and to gradually bring sense into the proportion of high level and medium level technicians. This is yet another major aspect in the improvement of the cultural and scientific quality of China's population. Vigorous development of after hours training of on-the-job cadres is a major component part of China's educational system. All echelons of party and government organizations, all branches of military service, and all units in business enterprises should give extreme emphasis to after hours training of on-the-job cadres, actively create conditions, provide all possible inducements, adopt multiple forms of providing education, and fully arouse the enthusiasm of workers and staff employees for study so as to further improve their cultural and scientific quality. Finally, we recommend the pre-school education of children. Experience has shown that the pre-school education of children produces fine results in their morals, knowledge, physical condition, and artistic sense, and helps in the early production of qualified people, the rapid production of qualified people, and in improving the quality of the population.

9432
CSO: 4006

PRC JOURNAL ON PRODUCTIVE, NONPRODUCTIVE LABOR

HK110548 Beijing JINGJI YANJIU in Chinese No 12, 20 Dec 80 pp 37-41

[Article by Zhang Jitao [1728 1376 3447] and Xia Xingyuan [1115 5281 0954] of the Economic Research Department of the Hubei Institute of Finance and Economics: "Productive and Nonproductive Labor Under the Socialist System"]

[Text] The problem of distinguishing between productive labor and nonproductive labor remains one of the most important for the political economists. Having a correct understanding of and distinguishing clearly between productive and nonproductive labor under the socialist system is of important significance to the rational organization of the proportional relations within the national economy, to the development of the cause of science, culture, education and the service trades, to the study of the distribution and redistribution of the national income, and so forth. It is the intention of this article to make some inquiries into this problem.

I. On the Concept of Productive Labor

Productive labor can be regarded as the activity carried on by people in the social production process. It is inseparable from the social production process. Therefore, we should approach the study of productive labor in much the same way as we approach the study of the social production process. We should make observations from both the aspects of the relationship between man and nature and of the relationship between man and man. Marx pointed out that: "The concept of the production worker is in no way restricted to the relationship between activity and results and the relationship between the worker and the product of labor, for it also includes a peculiarly social, historically produced production relationship." (Marx: "Das Kapital," vol 1, The People's Publishing House 1975 Edition, p 556, 555)

In his analysis of the concept of productive labor, Marx did in fact proceed from two different angles. On the one hand, he "abstractly, and leaving aside various historical forms, observed it as the course of the relationship between man and nature." (Ibid) That is, he observed it from the angle of the general labor process. But, at the same time, Marx was of the opinion that "this definition of productive labor obtained from the simple labor process is grossly inadequate when applied to the capitalist production process." (Ibid., p 205, footnote 7) Therefore, he continued to make observations from the angle that "the characteristic of labor being regarded as productive labor merely demonstrates a particular social production relationship," ("Complete Works of Marx and Engels," "The Theory of Surplus

Value," vol 26, part I, p 149) and stipulated that, as far as capitalist productive labor was concerned, "only labor that directy gives rise to surplus value is productive labor." (Marx: "The Results of the Direct Production Process," The People's Publishing House 1964 Edition, p 105)

What exactly is the significance of these two definitions of productive labor laid down by Marx after observation from different angles? Economists are divided on this point. One view merely emphasizes the point that productive labor is the embodiment of the essence of the production relationship, and does not take into account whether or not this kind of labor is such as to yield specific results in the production process. The view is that so long as it is labor which embodies the particular essence of the production relationship, it can be regarded as productive labor. In a capitalist society, all labor capable of bringing in profit for the capitalists is productive labor; under the socialist system, so long as it is labor which meets the laborers' needs, it can be regarded as productive labor. Another view merely emphasizes the fact that productive labor is the labor expended in the production of material goods. The view is that, under the capitalist system, although it is capable of bringing in profit for the capitalists, labor that is not involved in the producton of material goods is not productive labor; under the socialist system, although it is capable of meeting the laborers' needs, labor that is not involved in the production of material goods is again not productive labor. We are of the opinion that there is a definite one-sidedness about both these points of view.

Marx never intended the general definition of productive labor and the particular definition of the productive labor of a specific mode of production to be diametrically opposed or mutually exclusive, but to be closely connected and mutually integrated. Leaving aside various concrete historical forms, what the general definition of productive labor reflects does not embody the general nature of the essential characteristic of the specific production relationship; the particular definition of the productive labor of a specific mode of production is an "even closer formulation" than the definition of general productive labor. On touching upon the distinction and connection between general productive labor capitalist productive labor, Marx once pointed out: "Proceeding purely from the point of view of the general labor process, the labor expended in the manufacture of products, or to put it more precisely, in the manufacture of commodities, appears to us to be productive labor. But proceeding from the point of view of the capitalist production process, a more precise stipulation must be added to this: productive labor is labor which directly increases capital, or labor which directly gives rise to surplus value." (Marx: "The Results of the Direct Production Process," p 105) At the same time, Marx also listed "teachers" who "work on children's minds"; "actors" and even "comedians"; "female singers" together with Milton, the author of "Paradise Lost," and so on. Although their labor is not expended in the production of material goods, it is, just like material goods, capable of meeting certain public needs. It can likewise be consumed and likewise has use value. Under capitalist conditions, they also give rise to surplus value, and their labor is therefore also capitalist productive labor. Thus it can be seen, that the particular definition of the productive labor of a specific mode of production in no way refutes the definition of general productive labor. It is but a further formulation made in accordance with the essential characteristic of the specific production relationship. A further complement to the definition and intension of general productive labor.

In order to illustrate the close connection between the general definition of productive labor and the particular definition of capitalist productive labor, Marx further pointed out: "If we try to understand the productive laborer and nonproductive laborer in their narrower meanings, then productive labor is all labor expended in the production of commodities (production in this context includes all the stages which commodities must go through from the primary producer to the consumer), regardless of whether this labor is physical labor or nonphysical labor (labor in the field of science); nonproductive labor is labor which is not expended in the production of commodities, and is labor which does not have as its objective the production of commodities. This differentiation should on no account be neglected, and as far as this kind of situation is concerned, even if all other kinds of activities affect material production, or material production affects all other kinds of activities, this will not detract in the slightest from the necessity for this differentiation." ("Complete Works of Marx and Engels," "The Theory of Surplus Value," vol 26, part III, pp 476-477) This illustrates the following: First, if we try to understand productive labor, not from the point of view of the general labor process, but "in its narrower meaning," that is, in the sense of commodity production, then, all labor expended in the production of commodities is productive labor; all labor not expended in the production of commodities is not productive labor. Capitalist production is commodity production, and where it is not a case of commodity production, we cannot talk of capitalist productive labor. Second, "production" in this context should not be construed narrowly, for it includes all the stages which commodities must go through from the primary producer to the consumer. This includes all the labor necessary from the time production is commenced up to the time the products are finished, and also includes all the labor necessary from the time the products are distributed and exchanged up to the time they end up in the consumers' hands (including the labor expended in transporting, packaging, and insuring the products). Third, in any society, material production activities and all other kinds of activities exert an influence on each other, but the differentiation between productive labor and nonproductive labor cannot be changed on account of this mutual influence.

From this it can be seen, that the general definition of productive labor, that is, labor capable of obtaining definite results and providing definite use value, is a prerequisite for the particular definition of the productive labor of a specific mode of production, and that the particular definition of the productive labor of a specific mode of production is a formulation that goes even further than the general definition of productive labor. Therefore, these two should be integrated. This is the basic starting point in our analysis of productive labor and nonproductive labor under the socialist system.

II. Distinguishing Between the Signs of Productive Labor and Nonproductive Labor Under the Socialist System

According to our understanding of the concept of productive labor stated above, we must, in studying the distinguishing signs of productive labor and nonproductive labor under the socialist system, proceed first from the productive labor definition of the general labor process. Since the labor process is invariably conducted within a special, historical production relationship, not only does it produce and reproduce specific material goods, but it also produces and reproduces specific production relationships themselves. Therefore, we have still to integrate the socialist production relationships to enable us to make observations.

Under the socialist system, since we have established a public ownership system for the means of production and the laborers have become the masters of society, the aim of production is to meet the needs of society and of the people. Production for none other than man and his needs remains the essential characteristic of the relationships of the socialist economy. Socialist labor is labor which is pooled on the basis that the means of production are publicly owned and without the need for exploitation or oppression. It is labor expended for the sake of society, for the collective whole. Therefore, as the productive labor concept which reflects the socialist production relationships, it is, unlike the productive labor concept that reflects the capitalist production relationships, not so limited within the confines of extracting surplus value. It has grown much wider, and its limiting condition is that it has as its aim the meeting of the ever increasing material and cultural needs of society as a whole.

We are of the opinion that productive labor under the socialist system needs both the concept of general productive labor as a prerequisite and also to embody the essential characteristic of the socialist production relationships. At the same time, the peculiarity that the socialist economy is still a commodity economy needs to be considered as well. Therefore, productive labor under socialism can be formulated as being: labor which provides definite use value (which can be regarded as commodities giving rise to value on their production), and which is capable of meeting the everyday material and cultural needs of society. (Since labor under socialism does not yet possess a directly social nature, productive labor under socialism has to be socially recognized labor. Labor expended in the production of useless goods, or labor wasted in production due to the fact that it exceeds the amount of labor required by society cannot be regarded as productive labor under socialism.)

We need to fully understand what is meant by labor which provides definite use value. There are, generally speaking, two situations in which labor provides definite use value: One is where labor is directed at certain concrete material products, supplying certain products which have use value. This consists in the main of the means of production and the means of consumption created by the sectors producing material goods, and includes the products created by certain service trades like the food and drink processing trade, the dress processing trade, the repairing trades, and so forth. The other is where labor, although not directed at specific concrete material products, is nevertheless capable of creating a use value which meets certain social needs. This consists in teh main of the service sectors together with the "labor tasks" provided by doctors, teachers, actors, and so forth. The main feature of this kind of labor is the inseparability of the products from the act of production. What it supplies us with is a kind of useful nonproductive effect. From this we can see, that from the point of view of the nature of the socialist production relationships, as long as it is capable of meeting the material and cultural needs of society, and regardless of whether it is labor which is directed at certain concrete material products or which provides certain kinds of concrete use value, or whether it is labor which is not directed at certain concrete material products but which is capable of creating a kind of useful effect that meets the needs of society, they should all belong to the category of socialist productive labor.

III. The Productive Labor Sectors Under Socialism

We are of the opinion that, under the socialist system, the sectors which belong to the category of productive labor consist mainly of the following:

1. The sectors producing material goods. The sectors producing material goods consist mainly of agriculture (including agriculture, forestry, animal husbandry, sideline production, and fishery), industry (including the excavation industry, the processing industry, the handicraft industry, and so forth), construction, communications and transportation, post and telecommunications, and so forth. The common feature of these sectors is that labor is materialized in the form of commodities and in the form of material wealth; in other words, human labor acts on the object of labor, causing it to undergo a material change, thus creating a product with definite use value to meet the needs of society. As for the communications and transportation sector and the post and telecommunications sector, although they do not create new material products, they are capable of transforming the position of products according to people's needs (like the communications and transportation industry), they are closely connected with production (like the post and telecommunications industry), and are therefore directly connected with the production of use value. They are the continuation of the production process. All these are naturally counted among the productive labor sectors.

Among the sectors producing material goods, not only is the labor of the various production workers and auxiliary workers productive labor, but also all labor expended in the production of material goods is productive labor as well. Marx pointed out: "All those participating in some mode or other of commodity production, from the true workers to the managers and engineers (to be distinguished from their capitalist counterparts), belong to the realm of the productive laborer." ("Complete Works of Marx and Engels," "The Theory of Surplus Value," vol 26, part 1, p 147) From this we can see that, among the sectors producing material goods under the socialist system, all labor expended in the production of material goods like the labor of engineers, technicians, designers, together with economic management workers, also belongs to the category of productive labor.

2. The sectors producing spiritual wealth. The sectors producing spiritual wealth consist mainly of scientific research, literary creation, music, drawing, sculpture, and so forth. Although the labor in these sectors doesnot directly create material wealth, it does nevertheless provide particular products like the scientific writings of scientists, the literary and artistic creations of writers, the drawings of artists, the songs composed by musicians, and so forth. "The results of their production are commodities, and these have use value. They enjoy a form which is independent of the producer and the consumer, and so they can exist in the period between production and consumption, and can circulate in this period as saleable commodities, like books, pictures, and all artistic works existing independently of the artists' artistic activities." (Ibid., p 442) The spiritual wealth created by this labor likewise provides a use value to meet the needs of society. Therefore, the sectors producing spiritual wealth are likewise counted among the productive labor sectors.

3. The labor task sectors meeting the consumption needs of society. The labor task sectors meeting the consumption needs of society consist mainly of tourism, medical treatment, environmental protection, photography, hairdressing, public bathhouses, and so forth. The main feature of these sectors is that labor is

consumed while it is in motion. Although it is not directed at particular material products, and although it does not directly create material wealth, the labor in this sector provides a kind of use value existing in the form of a service, and does produce a kind of useful nonproductive effect. As Marx pointed: "These services themselves have use value, since their production cost also has exchange value. At any time, among consumer goods, besides consumer goods existing in the form of commodities, there is also included a fixed amount of consumer goods existing in the form of services." ("Complete Works of Marx and Engels," "The Theory of Surplus Value," vol 26, part I, p 160) This illustrates that these labor task sectors have likewise created a use value to directly meet the consumption needs of the laborers. It is just that these use values appear in the form of "services." Therefore, the labor task sectors meeting the consumption needs of society are also counted among the productive labor sectors.

4. The commercial sectors and the financial sectors. Speaking from the point of view of the commercial sectors, the labor expended by the commercial workers is mainly connected with the separate packaging, storage and transportation of commodity use value. This part of the labor is a continuation of the production process, and belongs to the category of productive labor. Apart from this, the commercial workers, in accordance with their experience of commodity management and the demands of the customers, put forward suggestions to the production sectors on the quality, variety of designs, type, model, and so forth of the commodities. This labor is the same as a designer's design and a plan put forward by an economist for improving administration and management. Although it does not directly create material wealth, it does directly affect the production of use value. This labor also belongs to the category of productive labor. As for the labor expended by the shop employees in the commercial sectors, they do bend over backwards to be of service to the customers and to deliver the commodities into the hands of the customers. They shorten the gap between commodities and the consumer. A substantial section of them are connected with the spatial movement of use value, and they directly meet the consumption needs of the people. Therefore, theirs is basically productive labor as well. In short, among the socialist commercial sectors, there are, in principle, no longer in existence speculative activities such as profiteering, buying and selling of stocks and shares, and so forth, which are characteristic of commerce in capitalist societies. Therefore, the socialist commercial sectors are counted among the productive labor sectors.

Speaking from the viewpoint of the financial sectors (banks, credit cooperatives, and so forth), although they are mainly concerned with the flow of currency and are not directly connected with the production of use value, these activities are absolutely vital to the social production process. With the banks strengthening their influence on enterprise production, the bank staff are serving and supervising the economic activities of the enterprises by means of the centralization and distribution of funds. Some activities are connected with engineering design, investment trends, construction of products, return on investment, and so forth; some activities are also connected with the improvement of the enterprises' administration and management, the economizing on capital expenditure, the acceleration of the rate of capital turnover, raising the efficiency of capital utilization, and so forth. All these have a direct effect on the production of use value, and so, under the socialist system, the financial sectors are basically also counted among the productive labor sectors.

5. The educational sectors. The aim of the educational sectors is to systematize the experience and knowledge accumulated by mankind in the course of the production struggle, class struggle and scientific experimentation, and to hand them down to those being educated by means of specific educational methods. Under socialist conditions, the laborers need both to enjoy a material life of daily abundance and to acquire sufficient physical and intellectual development. This is determined by the aims of socialist production. Marx and Engels divided people's consumption needs into survival, pleasure and development. The educational workers expend their labor in guiding those being educated through their study of scientific and cultural knowledge, and in subjecting them to various kinds of training, thus directly meeting their need for self-development and self-advancement. This is also used to meet a public consumption need. Speaking in this context, the labor expended by the educational workers is productive labor, and the educational sectors are also counted among the productive labor sectors.

More and more people now recognize the fact that the labor expended by educational workers is productive labor, and that the educational sectors are productive labor sectors. However, when it comes to proving this, things do not appear to be quite the same. Some comrades argue that, from the point of view of training culturally and scientifically knowledgeable, as well as operationally skilled laborers, that is, from the point of view of the reproduction of the labor force, the labor expended by the educational workers is productive labor and that the educational sectors are productive labor sectors. This line or argument is worth studying. Raising the level of the laborers' scientific and cultural knowledge and operational skill amounts to the reproduction of the labor force, but the substance of the reproduction of the labor force does not end there. The laborers' meals, clothing, rest and recreation enable the laborers to carry on living, and also constitute the process whereby the labor force is reproduced. Obviously, the individual daily consumption activities of these laborers do not constitute productive labor. Marx, in analyzing the concept of productive labor of the classical English political economists Adam Smith, approved of Smith's differentiation between the production of the labor force and the production of commodities. Marx pointed out: "Smith should have recognized the fact that, as for productive labor, or labor which produces commodities, or labor which directly produces, trains, develops, maintains, or reproduces labor capacity itself, Smith's exclusion of the last mentioned kind of labor from his productive labor items was quite arbitrary. But, governed by some kind of sound instinct, he realized that if he included the last mentioned kind of labor here, he would have opened wide the door for various fallacies being passing off as productive labor." ("Complete Works of Marx and Engels," "The Theory of Surplus Value," vol 26, part I, p 164) From this we can see, that the labor extended by the educational workers is productive labor, that the educational sectors are counted among the productive labor sectors, and that this statement is made in connection with the fact that it also produces a kind of useful nonproductive effect and that it has provided a labor task that meets the needs of people seeking self-development and self-advancement through the study of scientific and cultural knowledge, and that we cannot argue from the angle of the reproduction of the labor force.

In addition, there is the question of the individual economy under the socialist system. The characteristic of the individual economy is that the laborers themselves own the means of production and themselves participate in labor. Although the individual economy at present in existence in our country's urban and rural areas still belongs to the realm of the small privately owned economy, the individual economy has never, historically speaking, been considered as an independent mode of production and has always been subsidiary to other economic forms holding a dominant position. For example, in a capitalist society, the individual economy of peasants and handicraft workers is likewise attached to the capitalist economic system. As for domestic labor which is regarded as a form of individual management, this is even more a special form of capitalist hired labor directly exploited by capitalists. The individual economy at present in existence in our country is the individual economy subordinate to the socialist publicly owned economy and the connection with the capitalist economy no longer exists. The objects which they serve are the laborers of socialism. The tax that they pay provides income for the socialist state. In the present situation whereby the level of the productive forces in our country is still not high, allowing the existence and development of the individual economy as an important complement to the socialist economy is favorable to meeting the needs of the people's lives and to solving the labor employment problem. Therefore the individual economy is also an indispensable source of strength in our country's national economy. And so, although the labor expended in the individual economy is different in nature from the labor expended in the socialist economy, because the individual economy, being an important complement to the socialist economy, also produces commodities or provides labor tasks to meet the needs of society as a whole, the labor engaged in by the laborers in the individual economy also belongs to the category of productive labor.

The above is our rough division of the productive labor sectors under the socialist system. Apart from these, the remaining sectors are for the most part counted among the nonproductive labor sectors. It should be pointed out that, in a socialist society, all labor, whether it is productive labor or nonproductive labor, is labor of benefit to the needed by a socialist society, and is a glorious and heroic undertaking. We differentiate between productive labor and nonproductive labor mainly for the purpose of carrying out a reasonable allocation of labor within society as a whole, so that the various kinds of labor may be suitably apportioned. It is also conductive to a correct calculation of the national income and the Gross National Product, so that at the same time as the production of material goods is developed, we can improve the work done in other sections like the commercial, financial, and service sectors, together with the scientific, cultural, educational, and health sectors.

[This article was received by this journal in September 1980]

CSO: 4006

NATIONAL POLICY AND ISSUES

FIXING OUTPUT QUOTAS FOR HOUSEHOLDS EXAMINED

HK110232 Beijing JINGJI YANJIU in Chinese No 1, 20 Jan 81 pp 64-67

[Article by Wang Guichen [3769 6311 1368] and Wei Daonan [7614 6670 0589] of the Agricultural Economic Research Institute of the Chinese Academy of Social Sciences: "Fixing Output Quotas for Individual Households"]

[Text] Over the past 2 years, the rural people's communes and production teams carried out various forms of the production responsibility system according to specific conditions in a bid to improve management. This system has played an important role in promoting agricultural production, consolidating the collective economy and increasing peasants' income. Fixing output quotas for individual households is one of the many forms of the system of responsibility for production. Practice by many production teams has proven that this method has helped increase production considerably. But there is argument as to whether the method of fixing output quotas for individual households will work. Therefore, further discussion on this method is necessary.

I

Fixing output quotas for individual household is a form of production responsibility system; it is a concrete method in the management of the collective economy.

In order to do a good job in production it is imperative for any production unit of the collective economy to form and perfect the production responsibility system; this situation applies to peasants in organizing collective production. Such a system was reflected as early as the early stage of preliminary cooperatives in the "Draft of Exemplary Regulations of Agricultural Producers' Cooperatives" and has been used now in many places.

In agricultural production, the production responsibility system can basically be divided into two categories. One is that it is not related with the final results of production; that is, it is a system of responsibility for production that is not related to production output. Another one is that it is related to the final results; that is, it is a system of responsibility for production that is related to output. These two types of systems also have many forms.

In implementing the production responsibility system that is not related to output, any working team or individual commune members who are responsible for production are only responsible for production and they receive labor payment after completion of their production task. Some production teams have formed fixed working groups to be collectively responsible for the production task. Such groups get workpoints based on fixed norms and the number of workpoints may be increased or decreased according to the quality of the job done. This method is called "one group and four specifications" in rural areas in [illegible] Province; it means that working groups are formed to be responsible for a specific job that is to be completed during a specific time with specified quality and specified payment. Some production teams have organized temporary working groups according to the job that is to be done and such groups are responsible for each job assignments. Some other production teams have placed the production task directly with commune members who will become responsible for production. As payment for the work, they will get workpoints from the production teams.

In carrying out the production responsibility system that is related to output, the working groups or individuals who are responsible for production will be responsible for the final results of production--output (or output value). The system of "three fixings of responsibility and one award" (fixed work norms, fixed output, fixed cost and award for overfulfillment of quotas and punishment for underfulfillment of quotas) that was implemented in the early stage of agricultural cooperation was in fact a system of responsibility related to output. The work carried out by various working groups in the process of raising crops will directly effect output. With the production responsibility system that is related to output, commune members are concerned with the whole process of production and with the quality of every type of farm work. Such a system also includes other forms such as assigning fixed output quotas (or joint output quotas) to teams, individuals and households. The form of fixing output quotas for groups and individuals has been accepted by many people as a form of production responsibility system. But some other people still do not acknowledge that fixing output quotas for individual households is a form of the same system. The fixing of output quotas for individual households differs with the former two forms only in the fact that by fixing output quotas for individual households it is the households of commune members that are responsible for production to production teams. All these forms represent a kind of economic relationship between contractors and production teams and such relations can only exist along with the existence of collective production teams. If we regard these forms as distribution of land and individual farming, then it will not be necessary for indiviudal households to be responsible for production. Therefore fixing output quotas for individual households is neither distribution of land nor individual farming; it is just a form of production responsibility system within the range of the collective economy. Some other people have regarded fixing output quotas for individual households as the same as land distribution and individual farming and hold that fixing output quotas for individual households means that the collective economy has collapsed and collective ownership has begun to waver. This shows that these people have misunderstood the nature of fixing output quotas for individual households.

Fixing output quotas for individual households in rural areas has been carried out in many forms that can be summarized into three categories.

First, fixing part of the production task or output quotas of crop production for individual households. The production teams practicing this form persist in public ownership of the means of production which are under their unified management and are used by them in a unified way. Under the premise of unified planning and management by production teams, these production teams have assigned certain production tasks to the individual households for fixed output quotas (or output value), fixed jobs, fixed costs and awards will be given for overfulfillment of quotas and punishment for underfulfillment of quotas. Guzhen Prefecture of Anhui Province has carried out this system with regard to "crops that demand no stone rollers" (the crops that do not require rollers in threshing such as corn, potatoes, peanuts and cotton). Some other places have carried out the form of "unifying paddy fields and distributing dryland" (paddy crops are unifiedly planted by the collective under the leadership of production teams while responsibility for output quotas for the crops on dryland is placed with individual households). Other forms that are carried out in other places include fixing output quotas of small amounts of industrial crops for individual households and fixing output quotas for forestry, animal husbandry and fishery and part of the subsidiary agricultural production for individual households.

Second, fixing the whole crop output quotas for individual households. The production teams that are carrying out this form also persist in the public ownership of the means of production. These production teams unifiedly manage and use big and medium-size farm machinery and tools. Farm cattle and plows are put under the management of a household or households and are at their disposal under the premise that in evaluating these cattle and plows, their value remains unchanged. Under the unified planning, management and accounting by production teams, all plowing and the production of all crops are assigned to individual households with fixed output quotas, work and costs as well as awards or punishment for overfulfillment or underfulfillment of the task. All the products are handed over to production teams for distribution. In the production teams where this system is carried out, generally each household is responsible for producing certain crops. A few production teams have entrusted production with specialized groups. In some places, brick production, food processing and subsidiary production of the collective economy are still undertaken by production teams and in other places part of such jobs is placed entrusted to individual households with particular technology.

Third, production teams assign all responsibility for the production of all crops to individual households. Such production teams also maintain public ownership of the means of production and unifiedly manage and use big and medium-size farm machinery and tools. But in some cases, farm machinery and tools are put under the responsibility of commune members who have acquired technology. In this case, the related commune members may submit a certain amount of output value to production teams to guarantee that farm machinery and tools are in good condition and to guarantee that during busy farming seasons this machinery and tools will be used to serve production teams. During slack seasons, the machinery and tools may be used in susidiary undertakings (such as transportation). Farm cattle and plow are put under the management of household or households and are at their disposal under the premise that in evaluating such cattle and plows, their value will remain unchanged. In some production teams, the time for the use of farm machinery and tools is fixed; and with this method, commune members are responsible only for fulfilling the task of selling farm and subisidary products to the state and for handing over various retentions to production brigades and production teams (these retentions include subsidies for cadres of production brigades and production teams, private school teachers, barefoot doctors, militia training, accumulation funds and public welfare funds). All surplus products belong to the commune members themselves.

The two above-mentioned methods persist in the collective ownership of the means of production. The production teams that are employing such methods unifiedly manage planning, accounting and distribution. Under these methods, individual households of commune members are only responsible for the production quotas assigned to them by production teams and these households carry out the work under the leadership of production teams. Each commune member is a member of the collective to which he is responsible. The income of commune members depends on the results of the production quotas they are responsible for and they are conditioned by the situation of the collective economy. It is clear that the method of fixing output quotas for individual households is a form of production responsibility system within the range of the collective economy. Some people have misunderstood collective production as merely working collectively. Following the employment of the method of fixing output quotas for individual households, the situation in which people are working collectively will usually disappear; but it is not correct to regard such a change as land distribution and individual farming. With distribution of land and individual farming, the means of production are privately owned by peasants, the production is decided by each household that it totally responsible for its own profits and losses and is in a position to handle all the products of its own accord. But that is not the case with the method of fixing output quotas for individual households; this method has nothing to do with land distribution and individual farming.

The three methods mentioned above in fixing output quotas for individual households show that commune members are more independent in carrying out production. It is no longer necessary for them to totally follow the planning of production teams once they have fulfilled the task of selling agricultural and subsidiary products to the state and handing over retentions to the collective. A considerable amount of harvests is at the disposal of commune members themselves. Some production teams do not render production costs to commune members or render a small amount, in this way, peasant households are virtually responsible in production for both profits and losses. Compared with the two above-mentioned methods, this method differs to some extent in unified management, accounting and distribution. However, the means of production still belong to the collective while commune members are also responsible for production to production teams and they carry out production under the leadership of production teams. Through contracts, production teams are able to control to a certain degree the production plans of individual households and to guarantee that these households will fulfill their tasks of selling products to the state and the collective. So it can be said that production teams have a certain right to control products. Production teams retain a certain proportion of the accumulated funds for the collective economy; some production teams have, in this way, purchased farm machinery and tools to increase their collective property. Production teams also have the right to arrange the labor force in undertaking large-scale public production. All this serves to show that this form differs very much from that of the individual households with private ownership of the means of production that carry out their production independently. It must be acknowledged that this method belongs to the sphere of the system of responsibility for production within the collective economy. It is just a form of fixing output quotas for individual households. If the collective economy has collapsed and each household has returned to individual farming under the cover of fixing output quotas for individual households, then such a situation no longer belongs to the sphere of the system of responsibility for fixing output quotas for individual households. This question will also be discussed in this article.

II

Labor organization and the production responsibility system are important contents of enterprise management. The form of labor organization and the production responsibility system is decided by objective conditions and is independent of one's will. There are many factors that make a production team employ a certain form:

First, it is decided by production tools. Marx said: "Labor organization and distribution differ according to the situation of production tools. Distribution of labor in using a hand grinder is different from that when a steam grinding machine is used." ("Selected Works of Marx and Engels," "Political Economics and Metaphysics," vol 1, p 12) When animals and hand tools are used in agricultural production, the form of organizing labor differs from that when mechanization is realized. With the former situation, only some work is done through coordination while most can be completed by a few people or even individuals. With the development of farm mechanization, the form of labor organization will also change. The farm work that was formerly done by a laborer may now be done by several laborers through coordination and division of labor. Farm work that was done by several or a dozen laborers in the past may now be completed by a single man or household.

Second, it is decided by the items and scale of production. The number of items to be produced by an enterprise has a direct effect on the form of labor organization. In an enterprise producting a single item, the form of labor organization is comparatively unitary. The enterprises with diversified activities need various specialized groups (or individuals and households) as forms of labor organization. For example, in addition to the groups that are responsible for crops, they may also form groups that are responsible for industrial crops, animal husbandry and forestry. The scale of production also affects the form of labor organization. For example, labor organization for taking care of a 5 mu fish pond differs from that of a 50 mu fish pond. Under the system of responsibility and under the same level of productive forces, it is more rational to assign small production quotas to individuals while the system of collective responsibility is more suitable for big-scale production.

Third, depends on cadres' management level. The scale of labor organization and the form of responsibility system are closely related with cadres' working capacity and management level. With higher management capability, cadres will be able to manage big-scale and complicated production activities. But cadres with low management capability can only manage production with small labor organization and simple processes.

Fourth, depends on residential conditions. Most agricultural production is carried out in comparatively extensive places and in open air and such production is usually called "open air factory." Whether laborers are living concentratedly or dispersedly will also affect the scale of labor organization and the form of the system of responsibility. In organizing labor in production, production teams have to consider whether commune members are living near to or far from worksites. Usually, labor is organized through those living nearby so that the laborers will not spend much time in walking to the sites. In some production teams in hilly regions, commune members are living even more scatteredly. Therefore when large-scale labor organization and collective labor are needed, commune members have to traverse far and wide and spend much time before they reach the sites and in this way production is affected.

Therefore, before an agricultural enterprise decides which form of responsibility system to employ, it must consider many factors and weigh up advantages and disadvantages. In this way, it can use the most beneficial form that will help display the initiative and creativeness of commune members in production as well as increase output and income.

It has been mentioned above that the form of labor organization is directly related to the level of the productive forces. With the development of agricultural mechanization, the form of labor organization and the form of responsibility system employed by agricultural enterprises will also change. But the two forms of production responsibility system, collective responsibility and individual responsibility will continue to exist. Basically speaking, fixing output quotas for individual households belongs to the category of individual responsibility. In future, with the development of agricultural mechanization, labor efficiency will be considerable improved and one person will be able to manage production of an item that requires several people at present. By then, the original labor organization and the form of responsibility system will consequenlty be changed; it is thus quite possible that the form of individual responsibility will be employed on a wider scale. A production team in our country usually has 200 to 300 mu of farmland. But each peasant household in France and West Germany has almost the same amount of farmland. If our agricultural productive force reach the same level as these countries, it is not impossible that a production team will place the production of all its land with a peasant household while the productive forces of the rest of the households will engage in other production. That is to say, with changes in production tools and increases in labor productivity, the original form of labor organization may be expanded or contracted. The words of Marx mentioned above about the formation and division of labor being decided by production tools are often referred to by some comrades. But they only refer to expansion and not decreases of such formation and division of labor. It seems to them that with higher mechanization the scale of labor organization is sure to become bigger and bigger, the system of collective responsiiblity will be demanded even more and the system of individual responsibility will be eliminated. Such a view is not complete.

No doubt the method of fixing output quotas for individual households and particularly the method of fixing "small and complete" output quotas for individual households carried out in some regions will develop into specialization (such as the forming of specialized groups, household and individuals) along the development of agricultural production and diversified economy. The method of placing production tools with specialized groups, household and individuals has now been employed in some places. But this method can only be carried out under the premise of the development of the productive forces and increases in production items. Without such a premise, the so-called specialized groups, households and individuals are nothing but empty words. Some comrades who disagree with the method of fixing output quotas for individual households agree with joint production by specialized households. Basically speaking, joint production by specialized households is also a form of the method of fixing output quotas for individual households.

It has been mentioned above that the form of labor organization and the form of production responsibility system to be employed by a production team are decided by its objective conditions. In order to do this, it is imperative for the production team to follow the principle of acting according to its specific conditions. In addition, the autonomy of the production team with regard to important matters must be respected and such matters must be discussed and decided upon by the broad masses of commune members according to their situation.

Production teams are agricultural enterprises with collective ownership and they are formed by peasant laborers. Under the remise of persisting in socialist orientation, abiding by state laws and following the correct state planning, these production teams have the right to decide their production according to their specific conditions, to distribute their products and income and to decide their own management methods. The autonomy of production teams means that the broad masses of commune members have the right to decide their own fate and this is an expression of the autonomy of the collective enterprises. The forms of responsibility system for production are decided by many factors and as the situation differs so much from one place to another, it is necessary for production teams and the broad masses of peasants to hold discussions before a form of production responsibility system that accords with their situation is employed.

In practice, the forms of responsibility system are often decided by higher organizations to infringe upon the autonomy of production teams and commune members in production. Some people's communes and production teams that have been able to increase production and income after employing the method of fixing output quotas for individual households according to their specific conditions have been banned from doing so by leading organizations because this method was considered dishonest practice. It is the duty of the party and government to guide peasants in advancing along the socialist road and it is the only way for final and common prosperity. Therefore in addition to respecting the rights of production teams and commune members, the party and government must render necessary guidance. But such guidance must be carried out through education and persuasion and example so that production teams and commune members will really receive such guidance ideologically. It is wrong and harmful to step up leadership through administrative orders or to forcibly "permit" and "ban."

III

The following are our views about some questions that are being much talked about today.

1. Some comrades say that the method of fixing output quotas for individual households is not the orientation, it is a "retrogression." What is progress? What is

retrogression? There is only one criterion for judging whether a relation of production or a management method represents progress or retrogression, that is whether it hinders the development of the productive forces. Whatever promotes the development of the productive forces is good and represents progress and whatever obstructs the development of the productive forces is not a good method and is retrogressive. A number of people's communes and productive teams that have introduced the method of fixing output quotas for individual households have aroused the initiative of commune members, increased output and income and made more contributions to the states. Therefore it is not correct to say that the method of fixing output quotas for individual households is retrogressive.

2. Some people say that fixing output quotas for individual households will make some people rich and some poor to bring about polarization. What is polarization after all? So-called polarization refers to class polarization. The condition of production under polarization is that the means of production belong to some people who became rich through possessing the labor achievements of other people without making compensation. Some other people who do not possess the means of production have to live on selling their labor. They are subject to exploitation and they are poor. The main point is exploitation. The method of fixing output quotas for individual households is carried out under the premise of public ownership of the means of production. Leasing or trading of land, usury, speculation and profiteering are all prohibited. Thus the method will in no way give rise to polarization.

With the introduction of fixing output quotas for individual households the output of the income of each household is different because each has different labor and technology and applies and uses different quality and quantity of fertilizer and fodder. Investigations show that on average the difference in income of various households ranges between 2 to 3 times. The difference of a few households ranges between 5 to 6 times and in some cases it is even bigger. Such differences are normal and inevitable during the stage of socialism. They represent different degrees of richness and they have nothing in common with class polarization that is caused by the relations of exploitation.

3. Some people say that the method of fixing output quotas for individual households will affect the morale of soldiers, cadres and workers. This view is wrong. The life of the families enjoying "five guarantees" and "four dependents" of Jinniu people's commune in Feixi County can be taken as an example. This people's commune is located in a hilly region and ranks medium grade and above in the whole country. In 1979, 135.5 production teams out of 156 in this prefecture began to introduce the method of fixing output quotas for individual households and the total grain output for the whole year was 2.73 million jin higher than the normal year of 1977. With the development of production, the life and income of the families enjoying "five guarantees" and "four dependents" have been improved. There are 194 such families with 801 members in the people's commune. The figures that are available for 172 families with 699 members show that on average per capita income in 1979 was 99.6 yuan, 59.5 percent higher than 1977; on average per capita grain distribution (including grain obtained from overfulfilling output quotas) was 703 jin, 44.4 percent higher than 1977. Of these 172 families, 147 have increased their income; the income of 11 families remained unchanged and that of the remaining 14 families which represented 8 percent of the total has decreased. These

families generally do not have enough laborers and lack technology and funds. With these conditions, the people's commune has taken the following measures: 1) Consideration is given with regard to workpoints for dependents of armymen, revolutionary martyrs and disabled armymen. 2) The "four dependents" families and the families with difficulties are responsible for a certain amount of land according to their ability. Those who have no ability have grain distribution from production teams (paid individually). 3) Unified arrangement is made by production teams in carrying out large-scale production works. Certain laborers from the households that do not have fixed output quotas or from the households with many laborers are transferred under the leadership of production teams to help such families. 4) Consideration is given with regard to chemical fertilizer, pesticide and loans. These measures have solved part of the difficulties of such families.

4. Some people said that with fixing output quotas for individual households, the land is divided into smaller plots that are not advantageous to agricultural mechanization and modernization. This problem has to be analyzed concretely.

First of all, there are many forms of fixing output quotas for individual households and we cannot say that none of these forms are suitable for mechanization. For example, the first and second forms that are mentioned in part one of this particle basically will not affect the use of machinery because according to these two forms, production teams can organize specialized groups or individuals to be responsible for machinery and can unifiedly arrange mechanical operation. Even with the third form, farm machinery can also display its role under good organization.

Second, farm mechanization takes many forms; therefore following the introduction of the method of fixing output quotas for individual households, some machinery may be affected, but not all. In some places, some production teams have sold their tractors and their cultivated area was decreased following the introduction of the method of fixing output quotas for individual households. But these production teams have done well in managing various machinery for irrigation, processing, transportation and threshing. Some production teams have even added some machinery. In some places, peasants have urgently demanded drying machines.

Third, concrete analysis must be made with the production teams that have sold their tractors and whose cultivated areas have consequently decreased. Some production teams have found it difficult to carry out mechanized farming because their cultivated areas have decreased following the introduction of fixing output quotas for individual households; some have sold their tractors because these tractors are of poor quality; some others have sold their tractors because these tractors have lain idle for many years. Commune members thought it is better for them to sell tractors and use the money in other ways. Therefore it is not fair to put all the blame on the method of fixing output quotas for individual households for selling tractors and decreasing the cultivated areas. Some production teams are practicing "six fixes and one award" contracts with tractor drivers who are responsible for fixed job, fixed quality, fixed cost, fixed consumption and fixed maintenance norm. These drivers will also be awarded or punished for overfulfilling or underfulfilling job quotas. This method has resulted in fairly good achievements. Therefore the problem also lies in the quality of organizing work.

Fourth, in some places, the collective economy of production teams was very poor. Such production teams were in heavy debt, with peasants living a hard life. With neither funds nor technology, they could not carry out mechanization. But since introducing fixing output quotas for individual households they have been able to arouse the initiative of commune members and increase production and income to accumulate funds for mechanization. They have thus advanced a step further in creating the conditions for mechanization. Hence, it is impractical to regard the method of fixing output quotas as contradictory to mechanization and modernization.

CSO: 4006

ECONOMIC PLANNING

BRIGADE, COMMUNE ENTERPRISES SHOW STEADY GROWTH

Chengdu SICHUAN RIBAO in Chinese 14 Jan 81 p 1

[Article by the planning office, provincial bureau of brigade and commune enterprises: "Brigade and Commune Enterprises Show Steady Growth in the Course of Readjustment"]

[Text] In 1980, Sichuan's brigade and commune enterprises gained steady development in the course of readjustment. The gross value of output achieved by brigade and commune enterprises reached 30.1 billion yuan, a 9.4 percent increase over 1979. Brigade and commune enterprises strove to increase production of light industry products to meet the needs of people's livelihood and of the market. Raw silk, silk goods, machine-made paper, paperboards, home-made paper and wine showed great growths. The volume of electricity generated by brigade and commune small hydroelectric plants reached 5 billion kwh, a 44.5 percent increase over 1979. Output of coal broke through the 10 million level to 10.14 million tons, an increase of 14.5 percent over the previous year. This alleviated the shortage of energy to a certain extent. Gold production reached 4,682 liang (the decimal system), a 68.3 percent increase over 1979. There was also a great growth of lead and zinc ores, pyrites, sulfur, phosphate rocks. Output of cement reached 450,000 tons, an increase of 48.6 percent over the previous year; 3,640 million bricks were made, 25.2 percent higher than in 1979. A lot of marble, plaster boards and fibre boards were trial-produced, and quantities of raw materials and construction materials were provided for major industries and urban and rural people.

Brigade and commune enterprises now account for 60-80 percent of the total output of bricks and tiles made in the province, one-fourth the coal produced, half of the gold produced and more than 90 percent of the medium and small farm implements made.

Development of brigade and commune enterprises has brought great benefits to the state, the collective and commune members. In 1980, brigade and commune enterprises across the province paid 110 million yuan tax to the state, an increase of 96 percent over 1979. The enterprises refunded nearly 300 million yuan work-point payments to production teams, paid more than 600 million yuan wages and living allowances to commune members. Brigade and commune enterprises made 320 million yuan profits during the year. Part of these profits was delivered to communes to aid poverty-stricken brigades and farm capital construction. In addition, 15-20 percent of the profits were distributed directly to production teams. Distribution amounted to 10 million yuan in Wenjiang prefecture alone. The Xichong united sericulture enterprise drew 100,000 yuan or 31 percent of total from their annual profits and distributed the amount to production teams.

In 1980, the departments of brigade and commune enterprises proceeded with preliminary readjustment of brigade and commune enterprises in accordance with the policy of readjusting the national economy and on the principle that there are sources of raw materials, markets for products, conditions for production (construction) and profits to be made. More than 10 small iron works receiving state subsidy were suspended and output was cut down one-third. Most of the [illegible] phosphate fertilizers plants that lost money in Peiling and Jiangjin prefectures switched to production of cement. The brigade and commune machine-making industry showed its good point: "easy to turn round" and place its personnel. These machine-making enterprises voluntarily carried out readjustment according to changes in market conditions. In the course of readjustment, brigade and commune enterprises paid great attention to improving the quality of their products. Ten major kinds of products--machine-made paper, silk, cement, wine, rapeseed oil, machine-made clay bricks, hoes, sickles and saw sickles--were compared and appraised, and 117 enterprises were elected for good quality of products. Many products reached or topped the quality standards set by the state. Further, according to the requirement of readjustment, rational distribution of brigade and commune enterprises was worked out. Emphasis was laid on silk-reeling, paper-making and cement production. In order to display the predominant position of our province in the field of sericulture, 49 silk textile mills totaling 76,000 xu (4872) were continuously built, expanded or newly built. Ten mills totaling 12,400 xu were put into operation at the end of 1980. All the mills are expected to go into operation in the first half of this year. It generally takes about 1 year to have these brigade and commune silk textile mills built, costing an average of 83,000 yuan state investments per 1,000 xu. Some silk textile mills produced double A grade silk immediately after they went into operation. This state of affairs is seldom witnessed in the development of the sericulture industry in our province. The enterprises newly set up are in the form of united enterprises. Of the 49 silk textile mills set up in our province, 46 are operated jointly by communes or by brigades, and 1 is operated jointly by the state and communes. Thirty-three of them absorbed 5.77 million yuan investment from commune members. In this way, shortage of funds for brigades and communes is resolved and the relations are strengthened between enterprises and commune members. Further, brigade and commune practiced a "fixed award" system, linking workers' economic benefits directly to enterprise operations, giving full play to the enthusiasm of commune members engaging in industrial production. In 1981, all localities will implement further the policy of readjustment on the basis of summing up their lessons. They are determined to insure a steady development of brigade and commune enterprises in the wake of readjustment.

9780
CSO: 4006

ECONOMIC PLANNING

ECONOMIC JOURNAL ON MANAGERIAL SYSTEM

HK080829 Beijing JINGJI GUANLI [ECONOMIC MANAGEMENT] in Chinese No 1, 15 Jan 81 pp 39, 40

[Article by Zhou Muchang [0719 1970 2490]: "The Nanjing Wireless Company Tries Out the System of Managerial Responsibility Under the Leadership of the Board of Directors"]

[Text] The Nanjing Wireless Company is an integrated complex made up of factories with different subordinate relationships and ownership systems. Its establishment has, as far as the restructuring of the economic system is concerned, raised some questions worth special attention.

The Implementation of the Board (or Joint Committee) System Is the Appropriate Leadership System for the Enterprises in the Transition From Administrative Management to Economic Management

The board of directors of the Nanjing Wireless Company is made up of representatives from various sectors of the alliance: the Fourth Ministry of Machine-Building Jiangsu Province, the municipality of Nanjing, the factories, and other such units. It is the organ of power leading the management of the company. The company is implementing the system of managerial responsibility under the leadership of the board of directors. The board of directors practices collective leadership and holds collective discussion on important problems before making decisions. The board of directors is responsible for selecting and deciding on the company's manager, deputy manager, chief engineer, chief accountant and the person in charge of the enterprise section, as well as for carrying out supervision and conducting checks; for working out the company's management strategy and targets; for examining and ratifying the long-term programs put forward by the management, important capital construction improvement projects, important scientific research projects, and the annual plan and the budget; for resolving weighty problems such as whether the company should be operated jointly with companies financed with foreign capital or should join up with other domestic companies and factories; and for investigating the situation in implementing the target that the company has set itself, as well as for giving an evaluation of this. The board of directors convenes several regular meetings each year, and in special circumstances, the chairman of the board can call a conference at the last minute; when the committee is not in session, the chairman of the board or the appointed vice chairman of the board can lead the company in its work, without interfering with matters of management and administration that crop up in its day-to-day running.

In the organization process of a joint company, the first problem we run into is that of who should manage the company. Some advocate transferring power down to the factories affiliated to the ministry, so that the company may be managed at the local level. Some advocate transferring power upwards from the local factories, so that the company may be managed by the ministry. Neither of these proposals have managed to free themselves from the restriction of leadership of the enterprises by the administrative organs, and still treat the enterprises as appendages of the ministries and localities. Joint companies are organized according to the ties inherent in economic activities, and they must break through the restrictions imposed on the enterprises by the different subordinate relationships, the different ownership systems, the different trades, and the different administrative divisions. When the 38 factories of the Nanjing Wirless Company are divided up according to the ownership systems, 15 belong to the system of ownership by the whole people and 23 belong to the collective ownership system. When they are divided up according to the subordinate relationships, 1 is managed by the ministry and 37 are managed by the municipality of Nanjing. In the future the plant will join up with factories in other localities both inside and outside the province. Whether this kind of joint company is managed by the ministry or by a province or municipality, will not solve the problem. Furthermore, the plans are at present transmitted in a unified way, level by level, from the higher authorities. As regards public finance, they are carrying out centralization of revenue and expenditure. The distribution of products then comes under the planned allocation of means of production and national defense equipment. As for everyday goods, the method of state monopoly for purchase and marketing is adopted. In this way, all the activities of the enterprises are totally under the command of the higher administrative organs and are thus rigidly governed. Organized companies should not go around in circles when it comes to questions like "are you leading or am I?" And "Should we transfer power upwards or downwards?" They must shatter the fetters of traditional ideas and overcome the influence of the idea of the separation of administrative power.

Naturally, the organization of companies is at present being carried on in the whole national economic system under conditions that are very much the same as before, for we cannot employ the method of administrative orders to abolish the existing subordinate relationships of the enterprises. Our country's industrial enterprises were set up upon investment by the central authorities, the localities, and the collectives respectively, and the apportionment of profit should also be carried out in accordance with their own respective channels. At the same time, the responsible units of the enterprises still possess the right to direct production. The enterprises are at present still restricted in the expansion of their powers. Many business matters are still inevitably managed by the higher organs. In this situation, the organized companies must on the one hand carry out a bold restructuring, doing their best to reduce or avoid too much interference or restriction by the administrative organs, and on the other hand, they must put into effect the principle of mutual benefit and safeguard the interests of all sides of the alliance. The enterprises taking part in the company do not change the existing ownership system, they do not change the financial channels, nor do they change the subordinate relationships of the enterprises. The company's organizational leadership must embody the spirit of cooperation and coordination, of common responsibility, and of equality and mutual benefit, and must have the power to independently launch management activities. In this way, the leadership system of the board of directors or of the joint committee will emerge as the times require.

The Implementation by the Company of the System of Managerial Responsibility Under the Leadership of the Board of Director Constitutes a Restructuring of the Enterprises' Leadership System

In accordance with the decisions of the board of directors, the company manager assumes full responsibility for activities relating to day-to-day management and administration, and exercises the right, which the company possesses, of self-management in matters relating to management and administration. Within the joint company, the manager is responsible to the board of directors. The deputy manager, the chief engineer, the chief accountant together with the person in charge of the company's business department are nominated by the manager and approved by the board of directors. The deputy manager and the chief engineer are the manager's assistants and are jointly in charge of the various items of work.

It is imperative that the system of managerial responsibility should now be implemented. This is because: first, the company must have a center for transmitting independent, unified commands, and also set up an effective command system. The manager is precisely the commander in the command system. Only in this way can we guarantee the smooth launching of management activities. We have in the past implemented in the factories the system of the division of labor with the factory director assuming individual responsibility under the leadership of the party committee. The factory director was responsible to the party committee, and the deputy director was also responsible to the party committee. Everything had to be submitted to the party committee for discussion. Although it has been said that the party committee only discusses major problems, in the course of actual work, especially in a situation where there are differences of opinion, it is difficult to distinguish between major and general problems. In the end, the party secretary has to be consulted on both major and minor matters, thus converting it into a "one director system" consisting of the party secretary, as the factory cannot assume independent command of administrative affairs and a unified production command system cannot be instituted. This is unfavorable to the launching of economic activities. Secondly, there was no differentiation between the party and administration. The party committee was occupied with business, causing it to neglect itself, which in fact weakened the party in its work. Henceforth, the party committee must pay special attention to political and ideological work. It must insure and supervise the impelemntation by the enterprises of the party's general and specific policies, and it should not take direct charge of business affairs. Thirdly, the organization of the enterprises and the party is led by the local party committees, and there are some unified economic bodies that span different localities and the municipalities and some that span different provinces. These kinds of companies obviously cannot operate the system of managerial responsibility under the leadership of the party committee. Fourthly, we have in the future to embark upon joint ventures with overseas companies. This kind of company or factory could well have foreigners as managers or deputy managers, and there is no way that they can accept the system of managerial (directorial) responsibility under the leadership of the Communist Party. They can only accept the leadership of the board of directors.

Some people may wonder whether in doing this we are breaking away from the leadership of the party, and weakening its role. This is a misinterpretation. When we speak of the party's leadership in economic work, we mean leadership by the party as far as the line, principle, and policy are concerned. The party committee of the company is a primary organization of the party. Its duty is to lead the units that come under it and the party in their work, and it is responsible for the party's organization, ideology, inspection of discipline, and trade union and communist youth league work. It has to do a good job of ideological and political work, educate the party members to set good examples, and bring into play the initiative of the vast numbers of staff and workers. It also has to politically safeguard and supervise the management activities of the company.

Some people are worried that, after the implementation of the system of managerial responsibility, individuals might make arbitrary decisions and take peremptory actions. This must be, and indeed can be, prevented. Firstly, the board of directors must tighten up its checking of the manager's work. An annual assessment should be carried out. If management has been good, the manager should be commended. If he has been negligent or unequal to his task, he may be replaced at any time. Secondly, we should set up a democratic management system, and open up the manager's work to the supervision of the staff and worker masses. Thirdly, power goes hand in hand with responsibility. The responsibilities of managerial personnel should be clearly defined. If management loss has been incurred as a result of a manager's subjectivity, economic responsibility must be investigated up to the point of legal responsibility.

Problems That Need to be Further Studied and Solved

As for the implementation by the company of the system of managerial responsiblity under the leadership of the board of directors or the joint committee, there are still some problems that need to be studied and solved as far as understanding and practical work are concerned.

The problem of how the party committee and the adminsitration should divide up the work and manage the company is a pointed reflection of our lack of uniformity in understanding the problem of the supervision and of the engagement and dismissal of cadres. Some propose that the company should be managed by dividing up the work, while others propose that the company should come under the unified management of the party committee. The present cadre supervision system has not been restructured. Some of the cadres currently employed in the factories come under the supervision of the organizational department of the central committee, some come under the supervision of the organizational department of the municipal committee, while some come under the supervision of the company itself. Such a diverse cadre supervision system creates many difficulties in work. As far as the supervision of cadres is concerned, the system of managerial responsibility is in practice difficult to implement in entirety.

The present economic system is being restructured unevenly. For instance, the company is operating the system of managerial responsibility, the party and the administration divide up the work in their management of the company, and the party committee exercises a safeguarding and supervisory role. The factories are still operating the system of directorial responsibility under the leadership of the party committee whereby the work is divided up. Although this system also has to be changed, it is at present still in the experimental stage. One company has several dozen units, and several dozen trial points can be set up. But most of the units are still the same as before. Due to the lack of uniformity in the leadership system, there are contradictions in the course of practical work. The administrative and business problems decided by the manager have nevertheless to be implemented by the factory party committee. This system is also irrational. There are still some companies at present which have not set up a workers representative meeting. The problem of how to operate a democratic management system in the management and administration of the companies is one that awaits solution.

CSO: 4006

ECONOMIC PLANNING

BRIEFS

ANHUI ENTERPRISE MANAGEMENT SEMINAR--A 20-day seminar on enterprise management opened on 6 March in Hefei, Anhui, under the joint sponsorship of the China Enterprise Management Society and the Anhui Provincial Enterprise Management Society. The seminar is attended by more than 120 people from 15 provinces and municipalities. Six Japanese experts will give lectures at the seminar on Japan's experience in the management of production, financial affairs, markets and labor and the application of computers to these fields. [OW100151 Hefei Anhui Provincial Service in Mandarin 1100 GMT 7 Mar 81]

CSO: 4006

FINANCE AND BANKING

SICHUAN SAVINGS UP 400 MILLION YUAN IN 1980

Chengdu SICHUAN RIBAO in Chinese 22 Jan 81 p 1

[Article by correspondence group, Sichuan Provincial People's bank: "Savings Deposits Were Up 400 Million Yuan in Sichuan"]

[Text] Along with the readjustment and development of the national economy and the increase in people's income, savings deposits increased 53 percent to a record level of 400 million yuan last year. At the end of last year, savings deposits averaged 200 yuan each worker, a 40 percent increase over 1979. The increase in savings deposits played an important part in withdrawing money from circulation, reducing the pressure on the market, stabilizing the finance and commodity prices, replenishing state funds, and insuring economic readjustment.

Over the year, the People's Banks at various levels in our province have, under the single leadership of party and government, have introduced fixed deposits and current deposits service to meet different needs, once again increased the rate of interest on savings deposits, improved the service and suited the convenience of the masses, thereby stimulating mass enthusiasm for making savings deposits. Last year, the number of persons making savings deposits in cities and towns increased further, and the number of fixed deposit accounts increased to 40 percent and more. The number of people making small amounts of deposits and building up their savings into a large amount showed a marked increase. The amount of deposits exceeded 80 million yuan during the year. A gratifying increase of savings deposits was witnessed in various areas.

The People's Banks in our province will continue to step up their savings deposit service in accordance with the state policy of readjusting and stabilizing the economy. They will absorb savings deposits in order to organize withdrawal of money from circulation, build up people's purchasing power, alleviate the contradiction between commodity supply and demand, stabilize market prices, balance state credit income and expenses, insure smooth progress of economic readjustment, and better serve the four modernizations and people's livelihood.

9780
CSO: 4006

BRIEFS

HUNAN CURRENCY CONTROL--The Hunan provincial branch of the People's Bank of China has taken strict measures to control currency issuance in efforts to withdraw large amounts of currency from circulation. Approximately 340 million yuan were withdrawn from circulation throughout the province in February, or an increase of 240 million over the same period of 1980, fulfilling 28 percent of the currency withdrawal plan for the first half of 1981. While withdrawing currency from circulation, the provincial bank has also adopted such economic measures as credit management, unified management of interest rates and account system to exercise strict control over bonus payments and reduce the stock of supplies and commercial goods at warehouses and shorten the delays of circulating funds. [Changsha Hunan Provincial Service in Mandarin 1100 GMT 15 Mar 81 OW]

NEI MONGGOL COMMERCIAL TAX RATES--The Nei Monggol Autonomous Regional People's Government recently issued a circular on some additional regulations concerning readjusting the commercial and industrial tax rates of rural commune and brigade-run enterprises. The regulations stipulate that enterprises producing fertilizer, small farm implements and other products that directly serve agricultural production be exempted from commercial-industrial and income taxes. Brigade-run enterprises that offer services and engage in the processing industry with raw materials produced by themselves should be exempted from commercial-industrial and income taxes, provided their products are consumed by their own accounting units. Taxes will be levied on the services and products if they sell them to units other than their own accounting units. Incomes of commune and brigade-run enterprises are levied at the rate of 15 percent. Enterprises in disaster-ridden areas may be granted tax reductions or exemptions for 1 year by the county and banner authorities. The additional regulations will take effect 1 April 1981 [SK162202 Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 14 Mar 81]

TIANJIN BANK LOANS--Tianjin, 11 Mar (XINHUA)--Since early 1980, medium- and short-term loans have been allocated by the Tianjin branch of the People's Bank of China to support light and textile industries increasing output of consumer goods. Thanks to the 98 million yuan of medium- and short-term loans allocated in 1980, the city's output value of light and textile industries rose by 165 million yuan. According to preliminary statistics, when all projects under the special short-term loans are completed and put into operation, the city's output value may increase by 1 billion yuan annually and gain additional revenue of 330 million yuan. [OW162347 Beijing XINHUA Domestic Service in Chinese 1308 GMT 11 Mar 81]

SHANGHAI BANK LOANS--The Shanghai Branch of the Bank of China has reexamined 100 foreign exchange loans whose accounts have not yet been settled. It has taken steps to accelerate loan projects that yield faster and more steady results and to gradually cancel loans to projects more likely to have problems with raw materials, power and sales. To date, loans for seven projects totaling $14 million have been canceled. [OW162232 Shanghai City Service in Mandarin 2300 GMT 13 Mar 81]

ZHEJIANG COIN SHORTAGE--Recently listeners from Wenling, Yueqing and Huangyan counties in Zhejiang Province wrote to complain of the shortage of coins in local markets, which has affected business transactions and the circulation of fractional currency. A responsible person of the Provincial People's Bank, interviewed, attributed this to the increasing number of commercial service centers in recent years and the resulting greater demand for coins. The failure of some units to turn the coins over to the banks in due time after closing their businesses for the day is also another reason for the shortage. The coins circulated in the province last year was 74 percent more than in the previous year. The masses are urged not to believe rumors that the state is going to retrieve all coins, which are made of aluminium alloy, not silver or rare metal. Some people with ulterior motives try to deceive the masses and create confusion by engaging in the illegal, speculative purchase and sale of coins. These people should be reported to the industrial and commercial administration departments or public security organs. [Hangzhou Zhejiang Provincial Service in Mandarin 1100 GMT 8 Mar 81]

FUJIAN CREDIT SERVICE--The People's Bank in Fujian Province has reformed the system of credit operations in order to expand the scope of credit service and render greater support to economic and trade activities with foreign countries. Bank loans are being granted in both people's currency and foreign exchange as well as circulating funds to support export trade. Loans allocated in 1980 were 35 percent more than in 1979, while the loans of foreign exchange were three times as much as the total amount allocated from 1977 to 1979. [Fuzhou Fujian Provincial Service in Mandarin 1035 GMT 9 Mar 81]

CSO: 4006

ENERGY

PETROLEUM PRODUCTS SAID JUST AS PRECIOUS AS FOOD

Shenyang LIAONING RIBAO in Chinese 5 Jan 81 p 2

[Article by Liu Zhongxian [0491 1813 3759]: Petroleum Products Must be Controlled as Well as Foodstuffs Are Controlled"]

[Text] Petroleum is an important energy resource necessary for the development of national economy. It is also an indispensable strategic material for the national defense. Petroleum products obtained as a result of refining crude oil are the "fine grains" among all the energy resources, and they are the main sustenance of the automobiles, ships and tractors. Liaoning Province exports annually 1.3 million tons of petroleum products which are produced from processing 2.4 million tons of crude oil. It is easy to understand why petroleum products are so expensive. However, as far as the matter concerning control of petroleum products, their rational utilization, and their conservation are concerned, people pay less attention to it than to matters related to coal, fuel oil, and electricity.

First of all, leaders at every level do not pay sufficient attention to the matter and seldom inquire after the matter. Although an office was established in 1978 at each level to manage matters related to the unified purchase and distribution of petroleum products, the leaders only displayed their manners without visiting the front line. Petroleum products were often completely ignored when various activities related to conservation of energy were carried out. The conservation office of the government emphasized mainly the conservation of coal, fuel oil, and electricity. Scientific research activities related to energy resources seldom talked about petroleum products. Some societies concerned with energy resources don't even include petroleum products in their agenda. Several hundreds of million yuan of investment were made in 1980 for the development of technologies and measures to conserve energy, and only 160,000 yuan of this investment was spent on the petroleum products.

Secondly, the system itself is quite inadequate. The organization in charge of petroleum has, for so long, been administered simultaneously by a commercial or some other organization, with relatively few personnel. Although the government leaders have suggested that the petroleum products must be controlled just as the foodstuffs are controlled, this suggestion did not take shape in the form of a properly organized system. Foodstuffs are distributed to thousands and tens of thousands of families, while petroleum products are distributed to thousands and tens of thousands of plants and brigades. However, the similarity ends there. The latter is highly technical in nature and the personnel in charge of these two distribution systems ought to have very different qualifications. The present personnel in charge of the petroleum products have a hard time grasping the overall picture of consumption and conservation of tens of thousands of customers; much less to have control over the matter.

Thirdly, there are too many vehicles and equipment for the tasks to be accomplished. Automobiles and tractors developed early in Liaoning Province. Since the reorganization of the national economy in recent years a phenomenon has appeared everywhere which may be described as too many trucks for the amount of goods to be transported and too many tractors for the amount of land to be cultivated. For example, the provincewide highway freight transportation in 1978 increased to 2.5 times the volume in 1965, while the number of vehicles increased 5 times over the same period. Petroleum consumption is basically proportional to the number of vehicles; more vehicles means more oil consumption.

Fourthly, there is no control over usage. Many oil consuming units do not have any special personnel who controls the oil products, so that everybody uses oil as if eating from a "big pot." Many old vehicles, which are poorly maintained or repaired and cannot be overhauled, consume too much fuel. Some of these vehicles consume more than 50 kg of fuel per 100 km. The standard fuel consumpution for tractors is 1.6 kg/mu, and our vehicles consume more than twice as much. The fuel consumption of the domestic jeeps is one-third more than that of Shanghai sedans, while Shanghai sedans consume twice as much fuel as a small Japanese "Toyota" does. There are 85,000 heavy duty trucks in Liaoning today, but only 7.8 percent of these vehicles belong to the special transportation vehicle. The total number of these special transportation vehicles today is much smaller than the figure before the "Cultural Revolution." The transportation efficiency of the social vehicles is less than one-fourth of the special transportation vehicles. The gasoline wasted all over the province each year as a result of driving empty vehicles amounts to 150,000 tons based on a minimum of 30 percent of empty vehicles, a figure obtained by excluding the unavoidable factors. The provincewide consumption of kerosene for the household applications is 25,000 tons a year.

Fifthly, the price is unreasonable. The price of domestic petroleum products is only one-half the international market price. Fuel of agricultural application at a reduced price becomes cheaper than firewood. As a result, many undesirable side effects have taken place. Some cadres and members of agricultural communes would spend very little or no money in getting kerosene from the tractor station and use it for the cooking purposes. Some city plants and enterprises would go into the village and illegally purchase kerosene at a reduced price.

Sixthly, the storage link is very weak. A petroleum company is a profit-making enterprise, but it cannot get into the line for the basic construction investment. Petroleum commodity is large in volume, heavy, flammable, and explosive, but the storage conditions are extremely poor. While the annual provincewide sale of petroleum products was 1.3 million tons, there were only so many storage tanks with a total capacity of 400,000 m^3, amounting to the volume for only 2 month's sale. In contrast, Hebei Province's annual sale is no more than 1 million tons and they have a total storage capacity of 700,000 m^3, equivalent to the volume for one-half year's sale. Because of shortage of personnel, backwarndess of technology, and generally poor conditions of equipment, numerous accidents including exposure, leakage, spillage, and mixing of oils have taken place frequently. There were altogether 40 accidents provincewide last year during a period from January to October, with more than 1 million tons of fuel lost. The loss of fuel during its transportation and storage could not be kept at a level lower than the lowest historical level.

Development of production slowed by the shortage of energy resources is fast becoming the most frequently discussed topic today. Energy shortage was listed by the United Nations in 1979 as one of the four grave problems (energy, food, population, and environment) facing mankind today. China has a rich reserve of oil, but because of lack of control over its exploitation, construction, and usage in the past, the situation is becoming tense lately, and any significant growth cannot be expected to take place in the near future. Liaoning's resources for supplying petroleum products decreased 4.7 percent from 1979 to 1980, and 12 percent from 1980 to 1981. From a long-range viewpoint, petroleum is a resource which cannot be renewed. It is finite in amount after all; consume a little bit of it and that little bit is available no more. Therefore, leaders at every level, as well as every walk of life, must not ignore petroleum products and waste them carelessly.

Leaders at each level must first of all show respect for petroleum products and include them in important daily agenda together with coal, fuel oil, and electricity. Whenever a national economic plan is drafted, a balance between the production of vehicles and equipment and the resources of petroleum products must be maintained. To lead and to carry out conservation of petroleum products well, let it begin at the leader's small automobile.

The organizational personnel must be strengthened. If we wish to control petroleum products as well as we control the foodstuffs, we must draw the petroleum management grid finer with a larger number of grid points, then improve the quality of the front line personnel. We must classify the users of petroleum products and establish consumer I.D. cards with vehicles and equipment which use oil on file. We must correctly implement the policies concerning petroleum management and execute well the fixed amount supply work, while grasping the key points and taking care of everything at the same time.

Laws related to energy resources must be legislated. For example, illegal purchase, sale, or transfer of petroleum products must be fined at 50 percent the price of the product involved. Consumption of fuel oil over the fixed value by an nonagricultural transportation and combustion activities should be charged with double the price. Reward conservation and punish wastefulness.

Maintenance of equipment must be strengthened. Each department in charge must coordinate closely and reorganize once thoroughly the existing vehicles and equipment. That old equipment which is backward in technology and consumes an excessive amount of fuel ought to be retired. Equipment which consumes fuel 10 percent more than the fixed amount ought to be stopped and repaired. All small automobiles used by the low grade should be eliminated. Specifically, how many tons of freight per vehicle, how many mu of land per tractor, and what type of small automobile for cadre of what class, must be clearly spelled out. We suggest that the use of jeeps for all applications except for military and mining applications be banned, because jeeps are suited to the open field usage and their unit fuel consumption is one-third greater than the sedans. According to this rule, most of the units using jeeps today do not qualify. Production of jeeps should be slowed down in the future. The "vehicle management office" at each level must take charge over all types of vehicles including farm vehicles, passenger vehicles and small automobiles.

The masses must be mobilized to conserve fuel. In order to manage the oil matter well, every moderately large oil consuming enterprise must have at least one oil technical personnel, and every ordinary oil consumer unit must have a person in charge of oil matters. A group of representatives ought to be selected from the masses who will oversee matters related to conservation of energy, propagandizing conservation and preventing wastefulness. If the masses of every oil consuming unit will join in the movement and install fuel conservation devices on their vehicles and equipment, the total amount of oil that can be saved will be considerable. Automobiles alone can save 70,000 tons of fuel, according to an experiment carried out with "three layer throttle" and 9-hole piece."

9113
CSO: 4006

ENERGY

BRIEFS

YUNNAN COUNTY HYDROELECTRICITY--The installed capacity of the small hydroelectric power stations in eight counties in Yunnan has exceeded 10,000 kilowatts. These counties include Baoshan, Lijiang, Tengchong, Puer, Jinggu, Yiliang and Fengqing. The installed capacity of the small hydroelectric power stations has reached 19,800 kilowatts. Due to the development of small hydroelectric power stations, the people's daily life has been improved and local agricultural and industrial production has been promoted. [Kunming Yunnan Provincial Service in Mandarin 1100 GMT 10 Mar 81 HK]

HEILONGJIANG THERMAL POWERPLANT--Heilongjiang Province's largest thermal powerplant--(Hu-lar-ji) powerplant--is under construction. This project was approved by the state in May 1978. Construction is being carried out in two stages. The total designed generating capacity is 1 million kw. The installment of three 200,000-kw generating sets in the first stage construction has been virtually completed. An 18-mile railway network has been constructed, and the 21,366-meter highway network is 80 percent complete. [SK162207 Harbin Heilingjiang Provincial Service in Mandarin 1100 GMT 13 Mar 81]

HUNAN POWER INDUSTRY--While studying the documents of the working conference of the party Central Committee, personnel of the Hunan provincial bureau of power industry throughly reviewed the past development of Hunan's power industry and summed up experiences and lessons in an effort to do an even better job of power generation and supply in the course of economic readjustment. Instead of finishing the third-stage expansion project of (Jinzhushan) power plant, the provincial power industry bureau has decided to use the 12 million yuan of investment to install badly needed supplementary equipment on other existing power plants. The bureau has also worked out plans to suspend or defer several construction projects to cope with the needs of economic readjustment. [OW170101 Changsha Hunan Provincial Service in Mandarin 1100 GMT 11 Mar 81]

LIAONING TRANSMISSION LINE--China's first 500,000-voltage extra-high tension transmission line--a key project of Liaoning Province's power industry--is now under construction. By the end of February, some 103 miles of transmission lines had been put up, and the water tower project was 96.5 percent complete. The transmission line, running from Yuanbaoshan to Liaoyang city via Jinzhou, is 379 miles long. [Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 14 Mar 81 SK]

JIANGXI CITY ENERGY--The Fuzhou Municipal Scientific and Technological Commission, Jiangxi Province, has been popularizing advanced technology for conserving energy such as the far infrared heating technique and heat preservation with aluminum silicate refractory fiber material. These techniques are used in machine-building, electronics, pharmaceuticals, food-processing, plastics, tanning and paper-making plants with good results. [Nanchang Jiangxi Provincial Service in Mandarin 1100 GMT 14 Mar 81 OW]

XINJIANG FUEL CONSERVATION--The Xinjiang Regional People's Government held a meeting in Urumqi on 14 March to mobilize public opinion for the government decision to mothball 15-20 percent of the region's official passenger vehicles in order to save fuel. Tuohudi Shabier, vice chairman of the regional People's Government, pointed out that the measure was taken in light of the current low utilization ratio of official passenger vehicles and was aimed at improving vehicle management and reducing fuel consumption. He predicted that the measure could save up to 50,000 liters of gasoline this year. [Urumqi Xinjiang Regional Service in Mandarin 1300 GMT 14 Mar 81 OW]

SICHUAN COAL--In the second half of February 1981, the average daily output of the key coalmines in the province increased by 15.8 percent over the first half of the same month. Output of the whole month was higher than that of January. The total amount of tunneling in February was overfulfilled by 8.1 percent with an increase of 7.7 percent over January. The departments of finance revenue, commerce, grain, railways and posts and communications also effectively supported the coal production. The Chengdu Railway Bureau has included transport of coal as the key task. [Chengdu Sichuan Provincial Service in Mandarin 2300 GMT 5 Mar 81]

HENAN ELECTRICITY CONFERENCE--The recent Henan conference on electricity work formulated the key points for readjusting electricity supply this year. The key points include tapping potentials of the existing enterprises, and conducting technical innovation and transformation. This year the amount of electricity which the state assigned to Henan to produce is 4.4 percent more than last year. However, investment in the capital construction is only one-third of last year's total. The electricity departments have therefore decided to reduce the scale of capital construction and allocate the limited investment to the maintenance of three electrical generating plants and six power transmission projects. [Zhengzhou Henan Provincial Service in Mandarin 1100 GMT 6 Mar 81]

CSO: 4006

MINERAL RESOURCES

SHANDONG GOLD PRODUCTION INCREASES 29 PERCENT OVER 1979

Jinan DAZHONG RIBAO in Chinese 22 Jan 81 p 2

[Article by Zhang Xueren [1728 1331 0088]: "Shandong Gold Production Hits Record High"]

[Text] On the gold industry front in our province, resolute measures have been taken to adjust the extraction: tunneling ratio and to tap the latent power and carry out technical innovations and transformation on the existing basis. An excellent situation marked by vigorous development has arisen regarding gold production. In 1980, output of gold across the province increased 12.27 percent as compared with 1979, gross value of industrial production amounted to 48.57 million yuan and profits reached 19 million yuan, hitting record high. The amount of gold extracted by the masses reached 48 percent of the provincial total. Output of finished gold overfulfilled the state target by 93.33 percent, representing a 29.42 percent increase over 1979.

Since last year, Shandong's gold industry has vigorously adjusted the proportionate relations beween extraction and tunneling in the process of developing production. The total tunneling footage amounted to 83,000 meters in 1980, an increase of 10,000 meters over 1979. Thus, conditions were created for carrying on mining operation and changing the passive state of production. A few years ago, the proportionate relations between extraction and tunneling were not given importance in Zhaoyuan County, resulting in an imbalance between extraction and tunneling in mining operations. Last year, the county summed up experiences and lessons and, according to the requirement of objective economic laws, concentrated energy to adjust the extraction: tunneling ratio and promoted development of production. Production hit a record high in the province.

In the course of adjustment, the prefecture and county departments and mines tapped the latent power and carried out technical innovations and transformation on the present basis. The mining life of some old mines was prolonged and new resources were prospected. Last year, 13 million yuan of policy subsidy funds were used to arrange 114 projects for tapping the latent power and carrying out technical innovations and transformation. Ninety-three projects costing 12,730,000 yuan or 91 percent of total were designed to develop and extend the mines, increase the hoisting capacity, insure safety and protection and raise the managerial and technical levels. These investments were used for the purpose of exploring ores. More than 1.14 million tons of new ore reserves were obtained for sustained production of gold.

In the process of developing gold production, all prefectures and counties attached great importance to mass activities of extracting gold. They drew up some specific policies and measures for encouraging and aiding the masses to explore ores and extract gold. Most of the gold mines in Rushan County are commune-brigade enterprises and the mine workers are peasants, most of whom have become the backbone of production. In the past, these people, whose names were in their brigade residence booklets, were conspicuously distinct from regular staff and workers in terms of wages, grain rations and welfare beneftis. This dampened their enthusiasm. In view of this state of affairs, the county party committee decided to make the gold mine brigades pay wages to the peasant workers, to change the system of assessing jobs and recording work points into a wage system, and to make the mines allocate wage funds to the brigades according to provisions. As regards supply of grain, the system under which the peasant workers traded off their grain rations for grain bills was changed into one under which the brigades deliver grain to the state in summer and autumn and the whole county draws up unified plans for supplying a fixed amount of grain according to the types of work. Peasant workers enjoy the same labor protection and welfare benefits as the regular staff and workers. These measures have brought their enthusiasm into fuller play. At the same time, the provincial gold company and the relevant prefecture and county departments transferred experienced adminstrative personnel and technical personnel to form technical service teams for conducting geological surveys, mining ores and dressing ores. These service teams toured the centers where the masses extracted gold. The teams offered them guidance and helped them in their operation, thus giving a strong impetus to the development of gold production.

9780
CSO:4006

INDUSTRY

JIANGSU INDUSTRY ACHIEVED STEADY GROWTH LAST YEAR

Nangjing XINHUA RIBAO in Chinese 24 Jan 81 p 1

[Article by Jing Changyan [4842 2545 6056]: "Straightening the Production Course Through Reorganization and Raising the Economic Effectiveness Through Conservation; Jiangsu's Industrial Production Maintained a Sustained Steady Growth Last Year"]

[Text] By straightening the production course through reorganization and raising the economic effectiveness through conservation, Jiangsu's industrial system maintained a sustained steady growth of its production throughout 1980.

According to the figures compiled by the provincial statistical bureau, the provincewide gross industrial product last year increased 18.3 percent over the year before. The growth rate of light industry was 25 percent, surpassing that of heavy industry. The specific weight of the light industrial product in the gross industrial product has increased from 50.9 percent in 1979 to 54 percent. Among 110 major production items planned and handed down by the provincial government, 90 items have fulfilled the planned production goal with excess. Especially, those products for the service of agriculture such as chemical fertilizers, pesticides, and threshing machines and those products for the service of people's daily lives such as radio receivers, bicycles, watches, sewing machines, toilet paper, beverages, cotton cloth, nylon, and chemical fibers have shown considerable increase and contributed significantly to enlivening the market and improving people's lives.

The special features of Jiangsu's industrial production last year are as follows:

The production course was straightened by implementing the guidelines for reorganization. Due to the influence of the "leftist" ideal in the past, a large sector of Jiangsu's enterprises overemphasized services for the heavy industry and for the basic construction so far. During the course of implementing various guidelines for reorganization, many enterprises have straightened their production objectives and changed their emphasis to offer services for the light and textile industries, for the market, and for various activities related to digging up latent talent, reform, and reconstruction. Within just a year, production of those items which used to be overproduced such as mining equipment, the belt conveyer, mining cart, electric locomotive, compressor, motor, and transformer has dropped 60 percent or so while production of those items which used to be in short supply such as the power shovel, steam roller, movie projector, and electric clock has shown significant increase, thanks to the concerted effort by all concerned. Many enterprises have even organized their technical forces in order to help develop the production of those products which are in short supply, to establish the assembly line, and to improve the quality of the light and textile industries. As a result of the preliminary effort to straighten the service direction, the gross product of Jiangsu's mechanical industry last year was kept at the level of 1979.

The emphasis was placed on the light industry and the quality of its products. In planning for the production, emphasis was placed clearly on the development of light industrial production in order to satisfy the needs of people to eat, to wear, and to use as the primary responsibility of the industrial department. All the raw materials and fuel needed by the light industry must be supplied to it with preference. If there is any shortage of material needed for the light industrial production, the industry and commerce department must by one means or another provide them with the material so that a sustained growth of the light industrial production may be guaranteed. Of the 34 major categories of light industrial products, 27 categories have already shown growth of more than 10 percent. The quality of the products has also shown significant improvement. For example, the familiar S branch embroidered table cloth, the Yangzhou long wool yarn toys, the Lianyungang toilet paper, Yanghe Daqu, Shuanggou Daqu, the Nanjing fluorescent lamp, the Hui salt, cups with flower print, thermos bottles, lamp wick yarn, silk, white thread, dacron, and wool yarns, all these products have set domestic advanced standard.

Emphasizing the economic efficiency, increased production was achieved by practicing conservation. Conservation of energy resources has been emphasized by everybody. Some have organized technical forces to assit those units with high rate of energy consumption to improve their performance standard. Some have carried out technical reform in order to achieve more rational technology. Some have organized specialization and established energy conservation cooperation centers. Some have reduced their energy consumption by strengthening the management measures. According to one statistics, provincewide saving in coal in 1980 amounted to 1.15 million tons; coke, 48,000 tons; curde oil, 40,000 tons; and electricity, 310 million units. As a result of concerted effort by everybody to conserve resources and to increase production, the number of enterprises experiencing losses last year was 31 fewer than in 1979, and the amount of loss last year was 27 percent less than 1979.

The capacity of the existing enterprises was fully utilized by digging up the latent potential, and through reform and reconstruction the production capability for the popular commodities was raised. According to an incomplete statistics, there were a total of 556 reconstructions completed in Jiangsu last year and some of the reconstructions have already shown some economic effect. For example, leather manufacturing capacity was increased by 560,000 pieces while production of bath towels with flower print was increased by 1.5 million pieces. These activities have helped create conditions favorable to increasing production of market commodities and to raising the quality of these products.

However, there were also some problems that are in need of solution in Jiangsu's industry in 1980. The major problems include the following: There were some hidden unsafe factors inside the industry due to too much debt. Some of the overproduced products which ought to be reduced in number did not do so quickly enough and some of the products in short supply which ought to be increased in quantity could not do so. Some of the products were very poorly made; thus creating a new stockpile. Some plants were built blindly and so resulted in duplication. A situation which may be characterized as the smaller pushing the bigger, the newer pushing the older, and the backward pushing the advanced still existed. The provincial economic commission considers that in the next year, Jiangsu's industrial enterprises must implement the guidelines for reorganization one step further, emphasizing the economic effect, strengthening ideological and political work, mobilizing entire staffs and workers to demonstrate the revolutionary spirit characterized by perseverance and struggle, in order to accelerate the steady growth of the industrial production.

9113
CSO: 4006

INDUSTRY

ADVANCES IN INDUSTRY, TRANSPORTATION IN 1980 OUTLINED

Hong Kong CHING-CHI TAO-BAO [ECONOMIC REPORTER] in Chinese No 6, 28 Jan 81 pp 8-10

[Article by Jin Zhongyi [6855 0022 0001]: "China's Industry and Transportation in 1980 and Goals for 1981"]

[Text] The first year of the 1980's is over. During the year under review, China's industrial production continued to gain a greater rate of increase. On the basis of the 1979 increase of 8.5 percent over 1978, gross value of industrial output increased further by 8.4 percent, 17.4 percent for light industry and 1.6 percent for heavy industry. Of 100 major industrial products, 83 fulfilled or overfulfilled state plans. The quality of many products improved; consumption of energy, raw and processed materials declined. Enterprises achieved a greater success in tapping their latent power, carrying out technical innovations and transformation and making experiments to expand their power of self-management. In enlivening the economy and launching competition, enterprises improved their administration and management while a group of backward enterprises were closed down, suspended, merged or changed. Economic results were being gradually increased.

Annual Plans Satisfactorily Fulfilled by Industrial Departments

Coal industry: In 1980 the state appropriately lowered the production target in order to enable the industry to improve its proportionate relations between extraction and tunneling. Nationwide output of coal reached more than 600 million tons, down 4.7 percent from the 1979 level, fulfilling the state plan. In Shanxi Province, China's largest coal production base, output was up more than 10 percent compared with the previous year. Of the total, output available for distribution increased more than 5 percent.

Electric power industry: More than 297 billion kwh, an increase of 5.4 percent over 1979, was generated during the year, overfulfilling the electric energy production target set by the state. Thanks to satisfactory retention of water by many hydroelectric power stations, a total of 56.8 billion kwh was generated nationwide, topping the target by 22.4 percent and representing a 13 percent increase over 1979.

Petroleum industry: Output of crude oil topped 100 million tons; output of natural gas reached more than 13.8 billion cubic meters, fulfilling the annual state plan. Output of light oil produced from crude oil to meet the needs of light and chemical industries was up more than 30 percent compared with the previous year. The Daqing Petroleum Management Bureau, which accounted for half of the national output of crude oil, continued to maintain a steady and high output under the following unfavorable conditions: the overall moisture content reached 58.7 percent while natural decrease of crude oil yield amounted to 3 million tons a year. The Management Bureau launched readjustment and tapped the latent power with the central aim of insuring steady yield from the oil-field. The Bureau adopted a policy of mainly tapping the latent power of the old oil-fields and providing complete set of equipment while taking construction of new oil wells as a subsidiary measure. The crude oil production plan was fulfilled 10 days ahead of schedule.

Light and textile industries: Except for individual products which showed a surplus as a result of market regulation, output of 24 kinds of major light industry and textile industry products increased by bigger margins. Among these products, sewing machines, wrist watches, chemical fibres and woolen threads increased by about 30 percent compared with the previous year.

Metallurgical industry: Major products including steel, pig iron, rolled steel and nonferrous metals overfulfilled annual plans. Throughout the year the organizations of the metallurgical industry adopted multiple measures to enlarge the capacity for producing goods, shortage of which was felt on the market, increased production of goods that were in short supply, and cut down output of goods that were in excessive supply.

Chemical industry: Output of 18 kinds of major products including chemical fertilizers, sulfuric acid, soda ash, caustic soda fulfilled annual production plans. Among these, production of chemical fertilizers increased 17.5 percent compared with the previous year.

Construction materials industry: 13 kinds of major construction materials including cement, plate glass, and asbestos cement tiles overfulfilled annual production plans. Cement and plate glass increased respectively by 8.5 and 17.7 percent compared with the previous year.

Engineering industry: The engineering industry went through a process of readjustment. As production assignments were cut down, orders placed for goods earlier in the year amounted to only about 30 percent of the assignments fulfilled in the previous year. In this situation, the broad masses of workers in the engineering industry did everything possible to broaden the avenues, proceeded with regulation through the market and changed the practice of serving mainly industry and construction of new plants into a practice of simultaneously serving agriculture, light industry, urban construction and people's livelihood and helping the old plants tap their latent power and carry out technical innovations and transformation. Despite decrease of output of major products, the engineering industry still achieved good results, while the gross value of its output dropped only 5.3 percent compared with the previous year. Production of goods in short supply showed a greater increase.

Electronics industry: The situation was excellent regarding production of goods for civil use. Transistor radios and TV sets overfulfilled production plans and increased by about 100 percent compared with the previous year. Production of tape recorders increased nearly three times compared with the previous year.

Communications and transportation: 20 railway bureaus fulfilled their annual targets of volume of rail freight. The tasks of transporting major goods and materials including coal, timber, cement, chemical fertilizers, grain, cotton and phosphate rocks were fulfilled with good results. The volume of rail passenger service increased 6.8 percent compared with the previous year. The volume of water-borne transportation under the Ministry of Communications increased by 3.2 percent compared with the previous year. The volume of freight handled at harbors also overfulfilled the annual plans.

The volume of national import and export trade showed a great increase along with the development of industrial production. The total volume of annual imports and exports amounted to 54.6 billion yuan, topping the target by 8.5 percent, an increase of 20.7 percent compared with the previous year.

Initial Results Achieved

Despite no increase of energy sources, a high rate of increase was maintained in industrial production. The 1980 production of energy dropped 2.6 percent compared with 1979. Thanks to change in the industrial structure and product structure and to extensive mass activities to conserve energy, the tasks of conserving electricity 3 percent, coal 5 percent and oil 10 percent, equivalent to 27.5 million tons of standard coal projected for the whole year were overfulfilled. The change in industrial structure and product structure accounted for saving 17 million tons of standard coal. Improvement of administration and management and decrease of consumption accounted for saving 10.5 million tons of standard coal. Thermal power plants paid attention to conserving coal in operation and strove to generate more power and cut down consumption of coal. Eleven large networks each with a capacity of more than 10 million kwt in the northeast, north China and east China regions arranged as far as possible for large generating units consuming less coal to operate full capacity, and for small generating units consuming more coal to stop working or operate under capacity, thereby cutting down coal consumption. For supplying each kwh of electricity, the thermal power plants consumed 444 grams of coal, 14 grams less compared with the same period of the previous year, conserving a total of 3.36 million tons of oil.

The proportionate relations between light industry and heavy industry were gradually improved. Compared with 1979, China's light industry production was up 17.4 percent in 1980, far exceeding the 1.6 percent increase in heavy industry production. The proportion of light industry in the entire industry was up 46.7, 3.6 percent higher than in 1979. Following the Third Plenary Session of the 11th Party Central Committee, a series of measures were taken on the basis of the readjustment policy laid down by the Party Central Committee. These measures readjusted the porportionate relations between light industry and heavy industry and accelerated the growth of light industry. The growth rate of light industry began to exceed that of heavy industry in 1979. An excellent situation arose in 1980 when the growth rate of light industry increased by a big margin. The state went a step further and drew up and implemented "priority in six" measures with regard to light industry. The departments of light industry strove to increase production. In addition, the departments of heavy industry formed many types of united enterprises with light industry enterprises and vigorously developed light industry products to meet market needs.

Last year, apart from the departments of light industry and textile industry, other branches of industry produced various kinds of light industry and textile industry goods which accounted for more than 35 percent of the gross value of national light industry output. All provinces, municipalities and autonomous regions allocated more local financial resources to aid light industry and gave light industry priority in arranging supply of raw and processed materials and electric power and transportation. All this created favorable conditions for rapidly increasing light industry production, bettering the quality of products and increasing the variety of products.

Market regulation was insured under the guidance of state plans. In 1980, some branches of industry overcame their difficulties arising from lack of production assignments. They continued to broaden avenues, seriously surveyed public needs and produced goods urgently needed on the market. The organizations of engineering industry adopted multiple, flexible forms such as exhibition of electromechanical goods to strengthen their marketing activities and gear production to needs and did everything conceivable to serve the needs of all branches of industry. Their production jobs received through market regulation accounted for 46 percent of their annual production assignments.

Products in short supply were further increased while industry made progress in restructuring the product structure. For example, among steel products, four kinds in short supply including small wire rods, thin steel plates and welded pipes increased 27 percent compared with the previous year. The proportion of these four steel products in short supply increased from 48 percent in 1979 to 56 percent of the total output of steel products. Simultaneously with cutting down production of large engineering equipment, the engineering industry enlarged production of engineering products, including small bearings, small freezers, small air-blowers, and instruments and meters for civil use which were needed on the market. According to incomplete figures, the organizations under the First Ministry of Machine Building turned out only 23 kinds of products, valued at 650 million yuan, to serve light industry in 1979 and increased the variety to 93 kinds valued at approximately 4 billion yuan in 1980. There was also a great increase in sulfhuric acid, soda ash, caustic soda, plastics and ethylene produced by the departments of the chemical industry. In the course of readjustment a group of small copper and iron works, small chemical plants and small machine plants, which turned out poor-quality and high-cost products, consumed more materials and energy and polluted the environment were closed down, suspended, merged or changed. The technical force, plant premises and equipment of the enterprises closed down were utilized to increase the capacity for producing goods that were in short supply.

Adjustment of the proportionate relations between extraction and tunneling in mines was strengthened. In recent years, extraction and stripping showed a great imbalance, and projects for safety measures lagged behind in mines. In 1980, the coal mines in all localities took readjustment as their central task and strengthened their developing and tuneling operations. After 1 year of efforts, one-third of the mines completed their adjustment, and increased both the volume of developing coal and the volume of reserve coal. The quantity of coal extraction took a turn for the better. A number of coal mines improved their safety management. Industrial accidents in the coal mines under the centralized distribution bureaus showed a marked decline compared with 1979. Major nonferrous metal mines made up 60,000 meters of tuneling footage, 14,000 meters more than in 1979, and made up 149,000-cubic-meter filling-up operations, nearly 100,000 cubic meters more than in 1979.

Industrial enterprises achieved conspicuous successes in tapping their latent power and carrying out technical innovations and transformation. Among the energy-efficient measures taken in 1980, the projects for converting oil-burning boilers into coal-burning boilers formed a capacity for cutting down oil consumption by 2.6 million tons; a capacity for conserving coal, electricity and oil equivalent to 5 million tons of standard oil; a capacity for conserving substitute timbers equivalent to 600,000 cubic meters of logs; a capacity for increasing transportation of "coal from the west to the east" by 10 million tons, and increasing the volume of freight handled at harbors by 7 million tons; enlarged the production capacity of light and textile industries and increased production of many urgently needed goods that were in short supply.

Successful experiments were made to expand the enterprise power of self-management. The number of enterprises making experiments to expand their power of self-management increased from some 4,000 in 1979 to more than 6,000 in 1980. Also, 191 enterprises began experiments to "substitute tax payment for profit delivery," practice independent accounting and assume responsibility for their own profits and losses. These more than 6,000 experimental enterprises accounted for 16 percent of the number of industrial enterprises in the state financial budgets, 60 percent of the output value and 70 percent of profits. Better economic results were achieved after expansion of enterprise power of self-management. According to preliminary statistics covering 5,420 experimental enterprises, the value of their industrial output for January through September 1980 increased 12 percent compared with the same period of the previous uear, the total amount of their profits increased 17 percent, and their profits delivery increased 13 percent. Both the level of increased output value and the level of increased profit delivery were generally higher in the case of enterprises with expanded power of self-management as compared with those whose power of self-management was not expanded. Economic results were even more striking in the case of five Sichuan enterprises that made experiments to assume responsibility for their own profits and losses. The value of their industrial output for the period January through September 1980 increased 45 percent over the same period of the previous year, the total amount of their profits increased 80 percent and their profit delivery increased 46 percent. Since 1979, some experimental enterprises were operating under capacity because they did not have sufficient production assignments. However, since their power of self-management was expanded, these enterprises could not longer rely on the state for "eating from the same pot." On their own initiative they got production jobs, looked for raw and processed materials, and marketed their products. In January, these enterprises scored increase of produc- and profit delivery and gradually improved the living condition of their staff and workers.

Training of staff and workers made new progress and was gradually placed on a regular basis. According to incomplete figures, 13 provinces, municipalities and autonomous regions restored and set up cadres schools; the State Council ministries and central bureaus of industries and communications restored and set up 10 cadres schools; the State Economic Commission set up the Dalien Center of China Industrial and Technical Studies; various districts and departments provided intermediate and short-term training courses, organized leaders of industrial enterprises to study business management and trained more than 175,000 business management cadres at county level and above. This gave a strong impetus to industrial production and scientific management of enterprises.

The variety of industrial products increased and the quality of products improved. According to statistics on the quality targets for 64 main products turned out by major enterprises under 9 industrial departments--metallurgical, electric power, coal, petroleum, chemical, textile, light industry and railways--the quality of 53 products, or 82.5 percent of total, steadily improved during the period January-October 1980 compared with the same period of the previous year. Of 50 projects with comparable records, 28 or 56 percent reached or topped the best quality levels of the past. Light industry enterprises successfully trial-produced more than 7,000 kinds of products, with 100,000 new colors and designs, and put half of these products into serial porduction. In 1980, 392 products won good-quality certificates awarded by the Ministry of Light Industry. The quality of coal also improved. The ash content of marketable coal approached the best level of the past and its gangue rate was below the best level of the past. The quality of marketable coal produced in Shanxi was on average up one grade from the rate projected by the state, and its gangue rate was down to the best level of the past.

China's 1981 Goals for Industry and Transportation

In vigorously carrying out the policy centered on readjustment this year, the departments of industries and communications should proceed from the actual state of our country, strive to conform with the economic state of our country and the objective economic laws, and switch our industrial production from the old road of high speed, higher rate of consumption, better quality, more wealth created and better economic results. All departments should seriously solve the problems deserving attention in industrial production, adjust further the proportionate relations between light and heavy industries, between the mining industry and the communications industry, improve the quality and structure of China's industries and insure a healthy development of all industries and communications on the basis of new industrial structure and product structure. Further, all developments should pay great attention to economic results, lay emphasis on the matter of tapping the latent power of existing enterprises and carrying out technical innovations and transformation, and give full display to the present technical equipment and technical force. They should strengthen the transformation and improvement of the light industry and textile industry. Both in the sphere of production and in the sphere of circulation, they should pay attention to business accounting, make careful calculations and select "the best" plans so as to achieve the best economic results. In adjusting the industrial structure and product structure and enlivening the economy, they should insure overall balance and planned guidance and put an end to this irrational phenomenon: blind development, small plants jostling large plants, new plants jostling old plants and the backward jostling the advanced. They should adjust the direction in which goods that do not satisfy needs and goods that are unsalable are produced, and change the product structure. Enterprises should turn out their second products and provide technical equipment to produce commodities in greater variety of designs and colors. Further, they should integrate adjustment with economic combination and specialized cooperation and create greater production capacity. The existing enterprises in general should be reorganized, their administration and management improved and their economic results improved. Those enterprises that produce poor-quality goods, consume more resources and lose money for a long time should be resolutely closed down, suspended, merged or changed. At the moment, the economic system has been restructured with good results and this restructuring should be carried on persistently. In the process of readjustment, it is necessary to consolidate the results of restructuring, sum up experiences and solve the problems arising from the restructuring. It is anticipated that after years of serious efforts China's existing enterprises will certainly make a remarkable improvement in terms of organizational level, managerial level and technical level.

9780
CSO: 4006

INDUSTRY

INDUSTRIAL ENTERPRISES URGED TO LEARN FROM SHANGHAI

OW120806 Beijing XINHUA in English 0754 GMT 12 Mar 81

[Text] Beijing, 12 Mar (XINHUA)--Today's WORKERS' DAILY calls upon industrial enterprises throughout the country to learn from Shanghai, China's leading industrial city, in their drive to improve management and boost production of manufactured goods during the present national economic readjustment.

The paper reports that Henan Province where the light and textile industries are comparatively backward began last year to learn from Shanghai by sending technicians and workers to corresponding factories in Shanghai or inviting specialists from Shanghai to Henan to solve key technical problems. As a result, some 5,000 new textile items were introduced last year and profit derived from every 100 yuan produced by textile mills rose from some 11 yuan in 1979 to nearly 14 yuan in 1980. Moreover, a large number of high quality products are being produced.

Output value of the light and textile industries increased more than 17 percent last year, raising their proportion in the total industrial output value of the province from 46.9 percent to 50.9 percent.

Successes were also reported in Heilongjiang Province where 22 major light industrial and textile enterprises began learning from Shanghai in 1979.

In a frontpage commentary, the paper notes that Shanghai leads the country in enterprise management and technology, especially in the light and textile industries. Learning from Shanghai, the paper comments, "is one of the important ways to improve management and the economic performance of the country's enterprises."

CSO: 4020

BRIEFS

GUANGDONG INDUSTRY--In 1980, the speed of development and level of income of the industry and communication fronts in Guangdong exceeded the average level throughout China. In January 1981, the level of increase again exceeded that of the corresponding period in 1980 and of December 1980, reaching the highest monthly level ever recorded. In January 1981, the total output value of industry and communications in the province increased by 9.9 percent over the corresponding period of 1980, while profits of the state industry and communication enterprises in the localities increased by 15.1 percent. During the same period, the total output value of light industry increased by 10.3 percent over the corresponding period of 1980 and 4.7 percent over December 1980. This has rarely been seen in the history of Guangdong. However, some cadres still dare not persist in the measures for enlivening the economy and there is a shortage of energy resources. In some factories there are shortages of raw materials, while other enterprises do not have sufficient production tasks. Recently, the leading comrades of the Provincial CCP Committee and the provincial government organized 60 cadres to go deep into the basic-level units to grasp production. [Guangzhou Guangdong Provincial Service in Mandarin 2345 GMT 28 Feb 81]

NINGXIA INDUSTRY FORUM--On 27 February, the Ningxia Regional Economic Committee held a forum of responsible comrades of the industrial and communications system to analyze the current industrial situation in the region and exchange experiences. The participants pointed out that many factories, mines and other enterprises have scored achievements in implementing the central principle of further readjusting the national economy and have fulfilled and overfulfilled production tasks. The situation is better. However, quite a few enterprises still have not implemented production plans even with lower production targets. The quality of some of their products is still poor and they sell very little. (Li Jingxu), vice chairman of the Regional Economic Committee, demanded that the industry and communications enterprises effectively increase the output of light and textile industry in order to further satisfy the needs of the people's daily life. Regarding the weak enterprises, he said that they should further strengthen their leadership and do a good job of the staff's and workers' political and ideological work. [Yinchuan Ningxia Regional Service in Mandarin 2300 GMT 1 Mar 81]

GUANGDONG LIGHT, TEXTILE CONFERENCE--The 5-day conference to educate the staff and workers from the light and textile industry in Guangdong ended on 25 February. A total of 150 persons took part in the conference. The participants had studied the central instructions on education work, linked up with the reality of the light and textile industrial situation in the province, formulated a 10-year education plan for the staff and workers from the light and textile industry and studied the measures for implementing the education plans for the first 5 years, during which the number of technicians must be increased from the present 1.34 percent of the total number of staff and workers to 2.74 percent. The plans include study of politics, culture, technology and economic management. [HK040709 Guangzhou Guangdong Provincial Service in Mandarin 1120 GMT 26 Feb 81]

HEILONGJIANG INDUSTRIAL CONFERENCE--The Heilongjiang Provincial People's Government convened a conference on 10 March calling for industrial and communications enterprises across the province to open up more production avenues, successfully promote the education of staff and workers, make proper arrangements for the workers' livelihood and bring about a political situation characterized by stability and unity. Governor Chen Lei and Deputy Governor Chen Jianfei attended the conference and spoke. The conference notes that because of the economic readjustment, a number of new problems have appeared on the province's industrial and communications front. Without production assignments, some enterprises stopped operation; their workers were disorganized and did whatever they pleased and many public goods suffered damages. This has affected stability and unity. Leading bodies at all levels must pay great attention to these problems and take effective steps to solve them. The conference called for efforts to close as few enterprises as possible and merge or transfer as many as possible to other production tasks. Enterprises should organize laid off workers to learn cultural and technical knowledge and see to it that the properties of closed enterprises are well taken care of. [SK122245 Harbin Heilongjiang Provincial Service in Mandarin 1100 GMT 11 Mar 81 SK]

SHANDONG LIGHT INDUSTRY--Light and textile industrial sectors in Shandong Province have vigorously promoted products needed by the markets. During the first 2 months of 1981, light and textile industrial sectors increased their output value 12.8 percent over the corresponding 1980 period. Proportions of light and textile industrial ouput in the total industrial output increased to 55.2 percent this year as compared to 50.9 percent in the first 2 months of 1980. [SK162200 Jinan Shandong Provincial Service in Mandarin 2300 GMT 14 Mar 81 SK]

SHAANXI LIGHT INDUSTRY CONFERENCE--On the evening of 10 March, the Shaanxi Provincial People's Government held a telephone conference which called on the staff and workers on the industrial and communications front to promote industrial production. Provincial Vice Governor Hui Shigong presided over the conference. (Zhang Xuanren), chairman of the Shaanxi economic committee, spoke. As a result of the readjustment, light industry in the province this year increased by 6 percent, while heavy industry decreased by 17 percent. Of the 60 main industrial products in the province, 46 have been increased this year over the corresponding period of last year. Of these 46 products, 18 are light and textile industrial and electronics products. The participants were urged to go deep into the front line of production to help solve the problems in production and daily life, implement this year's production tasks as soon as possible, place mass work in an important position and do a good job of the aftermath tasks involving the projects which have been stopped and suspended. [Sian Shaanxi Provincial Service in Mandarin 2300 GMT 10 Mar 81 HK]

GUANGDONG INDUSTRIAL PRODUCTION--Guangdong Province greatly increased industrial production in January, and set a new record. The total industrial output value increased respectively by 9.9 and 0.7 percent over January and December 1980. Net profits and revenues of state industry and enterprises increased respectively by 15.7 and 6.8 over the corresponding month last year. Production of light industrial commodities have shown particularly great increases within a short period of time. The output value of the light industry production increased by respectively 10.3 and 4.7 percent over January and December 1980. Production of sewing-machine, bicycles, flasks, batteries, beer and high quality biscuits have been increased by 200 to 700 percent. Production of energy, construction materials, and chemical fertilizers was also increased. [Guangzhou Guangdong Provincial Service in Mandarin 2345 GMT 11 Feb 81 HK]

XIAN ECONOMIC IMPROVEMENT--Since the 3d Plenary Session of the 11th CCP Central Committee, the economic situation in Xian has improved with each passing year. At the same time, the industrial structure has also improved. In 1980, the total output value of the light and textile industries accounted for 54.86 percent of the total output value of all industries. Output of radios, bicycles and television sets increased by 12.4, 3 and [illegible] times respectively. In capital construction, 214 projects were either stopped or suspended last year in the municipality. During the same period, 565 collective-run enterprises went into operation. There were also individual commercial enterprises in 2,100 households, employing 50,000 persons. In 1980, 71,000 persons found jobs in Xian. Salary of technical staff and workers has increased by 18.5 percent. With more jobs available, the number of persons that each employee is responsible for has decreased from 3.06 persons in 1965 to 1.92 persons. The average monthly income of each person has reached 41 yuan and 6 jiao, an increase of 68.09 percent over 1965. However, profits from industrial enterprises dropped in 1980. [HK120144 Xian Shaanxi Provincial Service in Mandarin 1100 GMT 8 Mar 81]

SHANDONG TEXTILE INDUSTRY--Qingdao Municipality, Shandong Province, witnessed rapid growth of its light industry. Qingdao textile industrial output increased in 1980, 17.8 percent over the 1979 figure, and profits handed over to the state increased 26 percent over 1979. Coal and electricity consumption per 10,000 output value declined 10 and 7 percent from the 1979 figures, respectively. Textile industrial enterprises in the city saved 8,900 tons of coal and 10 million kwh of electricity. [Jinan Shandong Provincial Service in Mandarin 2300 GMT 27 Feb 81 SK]

HUBEI QUALITY REGULATIONS--The Hubei Provincial People's Government recently promulgated its "trial regulations on product quality supervision and inspection," which was the first such document with the force of a law ever distributed for implementation in the province. The regulations require a certificate of approval issued by a quality inspection organ for every single product, including those for export. A product whose quality is found to be below the prescribed standard will be refused such a certificate and not permitted to be moved out of the premises of its producer. A producer must also first obtain a quality approval certificate before registering any product as a patent product. Factories, mines and other enterprises which have long been manufacturing or producing in disregard of the prescribed criteria and refuse to adopt the measures suggested by a quality inspection organ will have to stop their production for reorganization. Otherwise, the quality inspection organ can notify the industry and commerce administrative departments concerned to suspend their licences. The provincial government also issued a circular along with the regulations, calling for implementation of the document to raise the quality of the province's products. [OW130103 Wuhan Hubei Provincial Service in Mandarin 1100 GMT 10 Mar 81 OW]

CSO: 4006

CONSTRUCTION

BRIEFS

HOUSING CONSTRUCTION, DEVELOPMENT COMPANY--Beijing, 8 Mar (XINHUA)--A housing enterprise, known as the China Housing and Construction and Development Company, has been founded in Beijing. The company will buy land, design and construct houses and buildings, and sell or put out to lease the houses and buildings. The projects to be undertaken will cover houses, hotels, office buildings, public utility buildings and their subsidiary facilities. The company will first start its business in Beijing, Tianjin and Tangshan, and if needs arise later, it will expand its operations to other localities. The company was jointly organized by the State Building Construction Bureau and the Chinese People's Construction Bank. Chairman of the board of directors is Xiao Tong [t135 2717], while vice chairmen are Liu Lixin [0491 4409 2946] and Feng Shunhua [7458 5293 5478]. Feng Shunhua is concurrently the general manager of the company. [Beijing XINHUA Domestic Service in Chinese 0012 GMT 8 Mar 81 OW]

CHENGDU CAPITAL CONSTRUCTION SUSPENSION--Chengdu Municipality has stopped and suspended a number of capital construction projects, including the Chengdu electric welding plant and a cement plant, making a total of 14 projects and reducing investment in capital construction by 9 million yuan. Some of these projects do not meet the requisite conditions for construction, while others are duplicate projects, and still others do not conform to the overall situation. At present, the departments concerned in Chengdu are paying attention to handling the job of the aftermath of these projects. [Chengdu Sichuan Provincial Service in Mandarin 2300 GMT 9 Mar 81 HK]

GUIZHOU CAPITAL CONSTRUCTION TIGHTENING--The departments concerned in Guizhou have recently decided to stop and suspend 40 capital construction projects, each of which represents a least 1 million yuan of investment, thus reducing capital construction investment by 117 million yuan. These 40 were selected from among 149 projects. [HK170911 Guiyang Guizhou Provincial Service in Mandarin 2315 GMT 10 Mar 81]

HENAN CAPITAL CONSTRUCTION CONFERENCE--The Henan leadership group for tightening up capital construction projects recently held a work conference on the aftermath of projects which have been stopped or suspended throughout Henan. The participants pointed out that the leadership groups of the various projects which have been stopped or suspended in the various prefectures, municipalities and departments concerned at the provincial level must do a good job of aftermath work or they will not be allowed to transfer from their work posts. The government departments at all levels must seriously check and make sure that this is being done. [Zhengzhou Henan Provincial Service in Mandarin 1100 GMT 13 Mar 81 HK]

BEIJING NEW HOUSING--Beijing, 13 Mar (XINHUA)--In the newly developed Jingsong and Tuanjiehu housing areas in Beijing city, new apartment buildings totaling more than 400,000 square meters in floor space were completed and turned over to occupants as of the end of 1980. An additional number of housing units with a total floor space of more than 70,000 square meters was turned over to occupants in late February and early March in the two housing areas. [Beijing XINHUA Domestic Service in Chinese 1223 GMT 13 Mar 81 OW]

HUBEI CAPITAL CONSTRUCTION CONFERENCE--The Hubei Provincial People's Government recently held a provincial capital construction work conference. The conference called for efforts to firmly control the scale of capital construction, stop or postpone projects that should be stopped or postponed, strictly follow capital construction procedures and put completed projects to use promptly. [Wuhan Hubei Provincial Service in Mandarin 1100 GMT 14 Mar 81 OW]

CSO: 4006

BRIEFS

KUNMING-HONG KONG TRADE--The 1981 talks on exporting leather goods to Hong Kong and Macao held by the China local products import and export general company was recently held in Hunming. Some 110 trade representatives from Hong Kong and Macao were invited to take part in the talks. The value of transactions carried out during the talks reached $3.5 million. Some 90 percent of the products on display were selected by the buyers. In 2 days of the talks, orders were fully booked. [Kunming Yunnan Provincial Service in Mandarin 1100 GMT 13 Mar 81 HK]

LIAONING EXPORT DIVERSION--The Liaoning Provincial Foreign Trade Department has deciced to divert some 100 million yuan worth of export goods for domestic consumption in 1981. This includes light, textile and chemical industrial products and native products. [Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 12 Mar 81 SK]

LIGHT INDUSTRY FAIR--The China Trade Fair of Stationery, Sportswear and Musical Instruments for Export, which is sponsored by the China National Light Industrial Products Import and Export Corporation, opened in Hangzhou, Zhejiang, on 8 March. It will be held until 15 March. Foreign trade branch companies from 20 provinces and municipalities exhibited more than 1,000 varieties of articles for use in offices and by students, paper products, sportswear and musical instruments. More than 150 traders from 21 countries and regions have been invited to visit the fair, which will adopt more flexible trade practices. The Zhejiang Provincial Light Industrial Products Import and Export Branch Corporation displays more than 100 varieties of general merchandise, leather products, electrical appliances and toys at the fair. [Hangzhou Zhejiang Provincial Service in Mandarin 1100 GMT 8 Mar 81]

ZHEJIANG EXPORT TRADE PORT--Hangzhou, 9 Mar (XINHUA)--With the approval of the State Council, Shenjiamen Port in Zhejiang's Zhoushan Archipelago has been designated as a foreign trade port. It began foreign trade shipping business on 1 March. Shenjiamen Port is located on the eastern tip of the Zhousahan Archipelago. It tops the rest of the country in the volume of fish products handled. [Beijing XINHUA Domestic Service in Chinese 0224 GMT 9 Mar 81]

CSO: 4006

LABOR AND WAGES

HIRING RETIREES AT HIGHER WAGES NEEDS STUDY

Beijing ZHONGGUO CAIMAO BAO [CHINA FINANCE AND TRADE JOURNAL] in Chinese 13 Jan 81 p 2

[Article by Li Zhixian [2621 1807 6343], Wu Zhaoqun [0702 5128 5028], and Zhang Jiqing [1728 4764 3237]: "The Problem Related to Hiring of Retired Workers at Higher Wages Is Worth Studying"]

[Text] In order to get talented personnel the factories, stores, repair and construction teams, and trade warehouses belonging to the street and suburban communes of Beijing Muncipality have resorted to hiring those retired workers who have had experience in business management at higher wages. Those retirees who reentered the job market could earn an income which is 1-3 times that before retirement. The practice of hiring retirees at higher wages has caused uneasiness among the present employees and adversely affected the production as well as establishment of coherent workers troops.

There are many youths in the street and commune enterprises with relatively little business experience, so that hiring some retirees with business experience is beneficial to the development of the collective enterprise. Therefore, the government policy allows this practice. In December 1979, the Beijing Municipality Labor Bureau jointly with the Treasury and Revenue Bureau issued an official notice concerning this matter ruling that when a retiree is reemployed, his new income including the wage, the retirement pay, and the subsidiary pay must not exceed the maximum standard wage earned before retirement. The problem is some of the hiring units do not adhere to this rule and raise the remuneration standard arbitrarily by creating, in addition to the regular wage and bonus, many other additional pays such as attendance pay, transportation pay, nutrition pay and even "trouble pay" and "shoe-wear pay." The sum total of various additional pays far exceeds the standard subsidiary pay. A repair and construction team at Haiding hired a retired engineer who received monthly, in addition to the subsidiary pay, 11 other additional pays. A street construction team of Hepingli hired a retired engineer who received a monthly income of more than 400 yuan including the subsidy, bonus, and additional pays. Some of the trade warehouses went so far as to "dig under the fence" of other units by offering higher wages in order to secure a retiree who is not only well versed in the business matter but also has good connections. Some of the workers who retired because of poor health came out of retirement in spite of their poor health under the pressure of a heafty reward. Some one had described the advantages of retirement thusly: "The retirement wage is higher; higher than that of bureau chief. With children leading the work groups, both old and young are full of joy."

The viewpoints on this matter vary widely from one unit to another. Some of the hiring units consider that if a retiree is to receive a subsidy of only 25 percent, then nobody will be interested in coming out of retirement, and this would be disadvantageous to the nation, to the collectives, and to the individuals. Some comrades argue: "For so many years we got mad whenever we saw someone making more money and we tried very hard to control it. The result is we are all poor. It is time we learned some lessons!" Many organizations, enterprises, and business units, for fear of being undermined or upsetting the morale of the present employees, take somewhat different views. They consider that the practice of hiring retirees at higher wages severely and adversely affects the establishment of coherent workers troops among the present employees and so is disadvantageous to the unity and concerted effort toward the four modernizations. One viewpoint that is popular among the present employees hold that "retiree or not, different pay for the same work makes one sick of working; so it is best to retire early." As a result, there are many workers not yet of retiring age who seek many excuses in order to retire early. A food company located in the Xicheng area had 121 workers retired from work last year; 86 of these retirees retired early. A certain worker at the Municipality Treasury and Revenue Bureau came back to work after retiring once with a substantial increase in income; a fact very upsetting to the present employees. More recently, four cadres at the level of division head applied for retirement; one of them was not yet 50 years old. There are also some workers "whose hearts already belong to 'Han' while their bodies are still in the 'Cao' camp"; they have already found places to work after retirement before retirement.

The practice of hiring retirees at higher wages should not be unchecked. Comrades from the departments concerned consider that the government must regulate this matter. However, if we regulate using the old method by sending those rehired retirees home summarily, such action will not be beneficial to the development of the collective economy and to the placement of youths, or, worse, some enterprises may even collapse as a result. It appears fair and reasonable that the total income of the rehired retiree be bigger than that before retirement. The question is how much more is appropriate. The most urgent task now is that the concerned department come up with an appropriate measure quickly. To be sure, no matter what measure is introduced we insist that it must comply with the principle of matching the reward with the labor. While we object to equalitarianism we must not ignore the plight of our "neighbors," that this nation is still quite poor so that our workers' wages and welfares cannot be raised too rapidly. In summary, we consider that the problem related to the wages of rehired retirees must be dealt with as part of the nationwide labor wage system and plan. It should not be treated as a problem detached from the national plan or treated as a "free market." Only by doing so are we able to draft measures based on the facts and actual circumstances so that the measures drafted have a chance of being implemented.

9113
CSO: 4006

LABOR AND WAGES

BRIEFS

SHANGHAI TRADE UNIONS--The Shanghai Municipal Trade Union Council today called a meeting of trade union cadres at and above company level. The meeting urged all trades to promote decorum and courtesy with "five stresses" and "four beauties" while launching a labor emulation drive to strive for higher production, so that material wealth and spiritual civilization can be created simultaneously. Reports on labor emulation drives to support four modernizations launched in 1980 were delivered at the meeting by trade union cadres from Shanghai No 1 Construction Company and six other companies in Shanghai. [Shanghai City Service in Mandarin 1130 GMT 1 Mar 81 OW]

CSO: 4006

'GONGLU' CARRIES VIEWS ON MODERNIZATION OF HIGHWAYS

Role in Economy

Beijing GONGLU [HIGHWAYS] No 7 in Chinese 25 Jul 80 pp 1-3

[Article by Liu Dayuan [0491 1129 0337], Bureau of Highways, Shanxi Provincial Transportation Department: "A Few Humble Views About Highway Modernization"]

[Text] By the end of this century, China will have completed its four modernizations. Highways are a major integral part of the national economy, which should play a "vanguard" role, so they too must be correspondingly modernized. But what path China's highway construction should take, and what level or what standards should be used in determining that highways have been modernized are questions that currently await exploration. Below are some humble views on these aspects alone.

I. Need To Begin With China's Realities

Comrade leaders in the Central Committee have said that we must modernize Chinese style, walking China's own road in the process of building the "four modernizations." Modernization of highways must also be a Chinese-style modernization that takes into account China's realities and follows our own road of development.

Before liberation, China's highways were extremely backward, and 30 years after the founding of the People's Republic they are still fairly backward despite the very great efforts made in highway construction. They have not only not caught up with advanced countries, but a large gap continues to exist in comparison with some Third World countries. The current circumstances and characteristics of the nation's highways may be categorized as having the following several major facets:

1. China presently has more than 900,000 kilometers of highways. Highways now serve all cities larger than county seats and most market towns and communes, but the distance along which uninterrupted highway travel is possible is inadequate; the density of highways is very low; and the layout is not only irrational but numerous roads simply come to an abrupt end. As yet it is not possible to operate motor vehicles directly from one county seat to another or between a substantial number of communes, and in numerous mountain regions and minority nationalities regions, no change has occurred as yet in their inaccessibility to transportation.

2. Technical standards for existing highways are very low. An overwhelming majority are low-grade roads, and quite a few are substandard. Highways of second grade and above are rare. Many road sections are highly inadequate to the volume of traffic they have to bear, and as a result there are traffic jams, very low-speed travel, frequent accidents, and even transportation blockage. Still other roads are not readily passable, subject to blockage in both fair weather and foul, or passable only at certain seasons of the year.

3. Mixed traffic--motorized vehicles, animal-drawn vehicles, and vehicles drawn by humans moving along together make things out of orderly transportation. Antiquated transportation vehicles will be gradually phased out, but they cannot be entirely eliminated in the near future. This is particularly true of tractors operating on highways, a practice that is expected to continue to increase for some time. Vehicular traffic is composed mostly of trucks and large passenger vehicles at present; and given China's social system, no great increase in the number of passenger automobiles can be expected within the near future. The future growth rate for motor vehicles may increase, but no excessively rapid growth is anticipated.

4. China is a vast land in which railroads form the main form of transportation over long distances. Highways are mostly for transportation engaged in short-haul collection and distribution; consequently, the distribution of the quantity of transportation is very unbalanced; fluctuation is great; and changes from normal routes shortlived. The situation in Shanxi is that most high-volume road sections are located near cities and industrial and mining areas, with some routes over which coal is transported. This rule will likely continue in future.

5. Except for expenditures made for capital construction or for national defense, road maintenance expenditures play the leading role in investment in road construction in China. Numerous highways have come into being as a result of road maintenance, which over the years resulted in rebuilding. Building work done by civilian laborers working on public projects is also a form of investment. County and commune highways were built by civilian laborers in a system operated by the citizenry with public support. In future, these two forms of investment will continue to play a role.

The foregoing explains that China has a certain foundation for highways, but it is still quite weak; and China also has its own ways of doing things, but they are still very incomplete. This is the present state of China's highways. Naturally, of even greater importance is to look at the realities for the entire country, since modernization of highways cannot be divorced from these realities. Only that which begins with China's realities can be positive and reliable.

II. On Chinese-Style Modernization

What constitutes Chinese-style highway modernization is a very difficult question to answer. Generally speaking, it should contain the following two points. First, when formulating highway building programs and policies, it is necessary, in view of China's realities, to realize that China is a country with a socialist system that possesses the advantageous elements of correct leadership by the party, a high degree of organizational ability, and a large amount of resources in manpower, in which the people harbor a great deal of enthusiasm for roadbuilding and in which a definite foundation in highway construction already exists. It is also necessary to realize, however, that China's economy is quite backward and possesses the disadvantageous elements of countless tasks waiting to be done, numerous places requiring investment of capital, a very poor foundation in existing roads, and a very imperfect work force and system of management. Make the most of advantages, surmount disadvantages, give full expression to the spirit of combining state investment of capital with reliance on the masses, and of combining professional work crews with mass action to formulate a set of programs and policies for highway construction suited to China that can arouse all kinds of positive factors. Second, beginning with what is needed and what is possible, seek truth in facts to formulate an estimate of China's highway construction goals for the year 2000. This goal must definitely be tied in with the speed of construction nationwide. It cannot be considered to be too high and amount to nothing in the end, nor can it be considered to be too low and come to nothing over a long period of time.

In short, it should better serve the building of the "four modernizations." Among the tasks for the future, action must be taken on both trunk roads and feeder roads with the emphasis going to the trunk roads. General construction of roads and improvement of existing roads must go along together, with the emphasis going to improvements (in individual areas with poor transportation, general construction should receive the emphasis).

Just what level should the modernization of China's highways have reached by the end of this century? I believe that achievement of the following several points is both possible and necessary.

1. Construction of a relatively good nationwide highway network in which national roads form the trunk highways, but which is composed of highways of all grades. Substantial completion of trunk lines connecting cities of county-seat size and larger, mining and industrial areas, and border defense areas, with a basically rational alinement of roads, and no roads that end abruptly, that will generally meet strategic needs. Expansion of basic highways in rural villages and mountain regions for travel from commune to commune and production brigade to production brigade.

2. Technical standards for all grades of highways to meet state requirements and the needs of a developing volume of traffic. National and provincial highway standards should generally be third grade and above, with a certain number of first- and second-grade highways. County and commune roads should generally be fourth grade and above, with a certain number of second- and third-grade highways. In individual major arteries with an exceptionally large volume of traffic, construction of high-speed highways.

3. Establishment of a specialized, relatively stable highway crew staffed with a substantial number of technical cadres and experienced workers. Highway technology should substantially approximate international standards, and a group of Chinese road experts should be trained.

4. For major road building and road maintenance tasks, there should be substantial mechanization, with some automation in individual cases. In surveying, designing, and other measuring and metering, fairly general use should be made of electronic computers, aerial surveys and such advanced techniques.

As to whether or not realization of the above objectives amounts to modernization must be looked at dialectically. If great progress is made in comparison with the present, one must say that the objective of modernization has been preliminarily achieved. Looked at in long-range terms or in comparison with foreign countries, we are still backward. The concept of modernization can mean different things and be subject to different interpretations in different countries at different times.

Advanced countries have already entered the stage of high-speed highways and automatic traffic control. Can China now begin with high-speed highways? I think this is not realistic, because high-speed highways are products of a high degree of socioeconomic development, and China is still a long way from possessing these conditions.

III. Several Things That Should Be Done Now

1. Highway communications are composed mostly of highways and motor vehicles. In a comparison of the two, China is mostly backward in its highways; it has no good highways, but its motor vehicles are more numerous and better, though unable to make full use of their intended role. Transformation of highway communications requires, first of all, transformation of the highways; therefore, every echelon of leadership in transportation units should establish a guiding mentality in which highways form the foundation, and conscientiously strengthen leadership in highway work.

2. Earliest possible formulation of short-range and long-range programs and policies for highway construction. Satisfactory solution of the relationship between the spread of highways and upgrading of highways, between trunk lines and feeder lines, between central and regional, and between state investment and reliance on the masses. All these relationships must be made concrete. In the formulation of programs and policies, foreign experience may be called upon, but most of all there should be a summarization of the experiences we ourselves already have.

3. Formulation of plans from top to bottom for all classes of highway networks. Those for state and provincial roads should be decided with particular rapidity. In the formulation of these plans, one must adhere to the principle that highways are to serve the national economy. Highway rights of way and technical standards should be determined by economic surveys and a calculation of long-range traffic volume. Planning must start with economic laws; the scientific is to be advocated; and subjectivism and blind action are to be overcome. Once plans have been made, active improvement and upgrading of existing highways should start to bring them up to necessary technical specifications.

4. There should be preparation of public opinion through widespread propagandization of the role of highway construction in the national economy, getting the state to put a highway transportation planning sytem together with industrial units, and satisfactory sorting out of the supply channels for investment and material equipment needed to build highways. Road maintenance funds are the present major source of funds, and they are urgently in need of good management and good use. The policies of civilian labor for construction also have to be revised and reiterated.

5. Through coordination with the Ministry of Education, special courses in highways should be increased in already established technical colleges and universities. Technical schools at the secondary level and various forms of on-the-job training for cadres should be developed to create the conditions for active establishment of a corps of highway technicians. This is a long-range task, but it must be conscientiously taken in hand right now; otherwise, we will make strategic mistakes in the future.

6. Active development of a roadbuilding machinery industry to provide specialized equipment for the mechanization of road building and road maintenance. This is a task that must be handled on a nationwide basis with full reliance on cooperation with machine industries and making full use of machinery in common use throughout society. There can be no independent waging of war by each province as is currently done in efforts to be small but complete. It is hoped that in this regard the Ministry of Transportation will make use of its necessary role in the organization of leaders to coordinate and organize forces from each province.

Finally, highway modernization is not something that highway units can complete by themselves. We must give a great deal of attention to and coordinate our efforts with other industries such as machinery, chemical, electronic, and construction materials. Highways are intended to serve the entire society, and we, too, must get the coordination and support of all industries for ourselves.

Study of Road Types

Beijing GONGLU [HIGHWAYS] in Chinese, No 7, 25 Jul 80 pp 3-6

[Article by Zhang Zuyin [1728 4371 5593]: "Some Perceptions About the Modernization of China's Highways"]

[Text] The four modernizations are a goal that China intends to reach within 20 years, and comrades on every fighting front in the nation are struggling toward this end. Highway transportation is an integral part of the national economy, and highway modernization is, of course, one part of the four modernizations. In my capacity as a highway worker, I would like to talk about some perceptions about China's highway modernization, providing these thoughts for reference.

I. The Meaning of China's Highway Modernization

My understanding of modernization is this. Modernization is the coordinated raising to the highest possible level of the national economy, the standard of living of the people, and national defense forces in terms of China's concrete circumstances. As regards advanced foreign levels, we should study and understand them well, and we should catch up with or exceed those parts of them that apply to the needs of China's modernization. But inasmuch as actual circumstances in China differ in many ways from [illegible], it is inappropriate for us to modernize China's highways entirely in accordance with the advanced levels of foreign countries, and to do so would slow down the pace of progress.

A concrete discussion of the modernization of China's highways must proceed from an analysis of the role of the highways. China's highways have four main roles:

1. To respond to and promote development of the national economy;
2. To meet the rising requirements of the people's cultural and material standards of living;
3. To meet national defense needs;
4. To meet social needs such as disaster relief.

The modernization of China's highways requires construction within 20 years of a highway system that satisfies the four requirements given above.

II. Tasks in the Modernization of China's Highways

Highways are to satisfy highway transportation. The task of modernizing China's highways must be decided in terms of requirements for highway transportation in China within the next 20 years and with due consideration being given to later developments. To figure out just how China's highway transportation situation will change within the next 20 years is a matter for which systematic survey and analytical data are lacking. It is difficult, therefore, to say definitely what the tasks will be for the modernization of China's highways. On the basis of existing data, here is an exploration of the tasks involved in the modernization of China's highways.

A. Need to Increase the Total Mileage of China's Highways

Though the mileage of China's highways open to traffic grew from 75,000 kilometers immediately following liberation to 890,000 kilometers as of the end of 1978, it is still inadequate to meet needs. To make a comparison with foreign countries, the average highway mileage per 10,000 of the population and per 100 square kilometers in China is 9.13 and 9.3 kilometers, respectively, which is less than India's 22.8 and 46.6 kilometers. In comparison with the economically advanced United States and Japan, the difference is even greater. Though it is true that China now has only a small number of motorcars, with only 1,358,000 civilian vehicles in use at the end of 1978, it is not very likely that any very large increase in the number of passenger cars will occur in the future. For a considerable period, highway transportation will generally consist of collecting and distributing and short-distance hauling. The number of vehicles will not increase the way they have in economically advanced capitalist countries; nevertheless, a need exists for an increase in highway mileage.

1. Need for development of roads in rural villages, and a particular need for vigorous development of roads in mountain region rural villages.

Economic development and improvement in the standard of living of the people in rural villages, and particularly in rural villages in mountain areas, depends to a very large extent on whether or not highways exist. In terms of need, production brigades have a fundamental need for highways. But in China today, there are still 5,000 communes and more than 100,000 production brigades without highways. The number of existing rural village roads must be said to be insufficient. Unless vigorous efforts are made to increase the mileage of roads in rural villages, highway transportation cannot very well serve agricultural production or improvement in the standard of living of the peasants. Even without talking about modernization of China's highways, this point is very obvious.

2. Need to increase a certain amount of trunk-line highway mileage. Highways already exist along China's main arteries. In the process of developing highway transportation, there can be increases in the mileage of trunk highways. Except for some old roads that have been reconstructed to form highways, some new trunk highways will have to be newly constructed.

3. Need to construct high-speed highways.

There has been a lot of heated discussion during the past several years as to whether the building of high-speed highways is necessary. I would first like to discuss just what constitues a high-speed highway, and what the major function of a high-speed highway is, after which I will discuss whether or not China should construct high-speed highways.

On ordinary highways, traffic congestion, inability to increase the speed of vehicles, and a high accident rate result basically from obstruction caused by vehicles in motion. The obstruction comes from two places. One is obstruction caused by vehicles in the traffic flow. This kind of obstruction is produced by the disparate speeds of vehicles. The greater the difference in speeds, the greater the obstruction. Non-motorized vehicles, tractors, and passenger cars jumbled together with large vehicles used for hauling people to and from work cause the greatest obstruction. The other cause is obstructions from the side, mainly obstructions caused by vehicles crossing at grade road intersections and obstructions caused by pedestrians jaywalking. One of the fundamental characteristics of high-speed highways is elimination or maximum reduction of these kinds of obstructions, thereby allowing vehicles to move along smoothly, substantially without any obstructions. Therefore, in the United States, high-speed highways are called freeways, which may be translated as free ways. In this context, free means without obstructions; thus such roads might also be called unobstructed roads. The major methods whereby high-speed highways eliminate and reduce obstructions are as follows:

(1) Only vehicles that travel at a certain speed (usually 50 kilometers per hour) are allowed on the highway, greatly reducing the differences in speed of vehicles going in the same direction;

(2) Placement of median strips to effectively separate vehicles traveling in opposite directions;
(3) Grade separation construction of all intersections;
(4) Complete control of exit and entrance.

Numbers (3) and (4) above can eliminate side interference. When these measures are adopted, interference is either eliminated or greatly reduced, but it is necessary as well to take action to organize and guide the orderly travel of vehicles in the flow of traffic, and, to the maximum extent possible, to reduce hidden dangers that produce accidents at high speeds. These actions are principally:

(1) increase linear and transverse standards;
(2) increasing the nonskid properties and levelness of the road surface;
(3) formulation of appropriate traffic regulations;
(4) installation of excellent traffic monitoring equipment, traffic control facilities, and traffic safety equipment.

Once these measures have been taken, it is possible to achieve the maximum traffic capacity (i.e., movement of the maximum number of vehicles every hour under specific driving conditions) to increase the speed of vehicles while reducing the accident rate.

In brief, high-speed highways are highways whose main function is elimination of interference and the adoption of measures to give them high traffic capacity, high vehicle speeds, and low accident rates. Some people say that high-speed highways are suited to situations in foreign countries with large numbers of passenger cars but not suited to China, which has large numbers of trucks and buses. This is mistaken. The elimination of interference and the adoption of measures that permit vehicles to move smoothly is suited to small and large vehicles alike, except for some differences in certain specific measures used. China's highways run along arteries where population is dense, requiring motorcars to travel along mixed up with nonmotorized vehicles and tractors. Once high-speed highways have been built, the benefits to transportation will, relatively speaking, be greater than in Western countries. Some people say that high-speed highways have been designed for speeds of 120 kilometers per hour, but since we do not have such high-speed vehicles, there is no need to build such high-speed highways. This is also mistaken. Design speeds are the highest speeds at which vehicles are able to travel safely in normal circumstances over restricted portions of highways; vehicles are not required to attain these speeds. Even in foreign countries where there are a large number of passenger vehicles, only a small number of vehicles travel at the highways' designed speeds; most vehicles go at a relatively lower speed. High-speed highways require only that vehicles capable of traveling at 50 kilometers per hour be permitted, and most types of vehicles are able to do this. The main factor in deciding whether to build high-speed highways is volume of traffic. As a rule of thumb, when traffic capacity is equivalent to that of a two-lane second-grade highway with a traffic volume that averages 10,000 medium-size trucks per day in any given year, or when traffic volume is between 5,000 and 10,000 vehicles but continuous movement of vehicles without interruption is desired, consideration should be given to construction of high-speed highways. The point of departure is when the volume of traffic reaches between 5,000 and 10,000 vehicles and the amount of land needed to build a high-speed highway is about the same as for an ordinary highway. When volume of traffic is more than 10,000 vehicles, less land will be needed for high-speed highways than for ordinary highways. The greater the volume of traffic, the greater the saving in land. When traffic volume averages 25,000 vehicles daily, a 100-kilometer high-speed highway can save 6,000 mu of land. Thus, it is not correct to say that high-speed highways take up a lot of land.

Looked at in terms of the volume of traffic they carry, many stretches of road already have a daily volume of 2,000 to 5,000 vehicles, and a few stretches of road carry more than 5,000 vehicles. The annual increase in volume of traffic on numerous highways is greater than 10 percent, so within 20 years the volume of traffic on some sections of roads will exceed 10,000 vehicles. Therefore, construction of some high-speed highways will become inevitable, and now is the time to continue with preparations for high-speed highways, including pertinent surveys of traffic volume and economics.

B. Need to Rebuild and Improve Existing Trunk Highways

The geometric configuration and quality of road surface are poor on numerous sections of existing trunk highways in China, and both traffic control and traffic safety equipment are lacking. Nevertheless, in recent years the volume of vehicular traffic on numerous trunk highways has risen dramatically. The growth has been particularly rapid on sections of roads entering or exiting large cities. When the mixture of nonmotorized vehicles and tractors is added to this, traffic congestion and blockages become more pronounced daily and improvements or new construction are urgently needed. This is a major current task in highway engineering.

III. Modernization of Highways Requires Mastery of Scientific Data

Highways are for the purpose of serving highway traffic, and no matter whether formulating highway network plans or a specific highway design, it is necessary to understand the current and the developing situation in highway traffic, and also to understand the suitability of each kind of highway for traffic. Therefore, it is necessary to carry out the following major investigative and research work.

1. The proportion and role of highway transportation relative to all forms of transportation.

Highway transportation is presently characterized mainly by use for collecting and distributing and for short hauls. The volume of cargo hauled is large, but the volume of turnover is small, with hauling distances averaging only 47 kilometers. Will this situation continue? Is it possible that there will be more highway transportation and that it will become the main mode of transportation among all the forms of transportation? Ever since liberation, highway transportation has been constantly increasing compared to all other forms of transportation. The volume of cargo hauled and volume of cargo turnover was 50.1 percent and 3.0 percent respectively in 1952, increasing to 68.4 percent and 9.2 percent respectively in 1978. What future changes will there be in this growth tendency and in this rate of growth? A comprehensive transportation study for railroads, water transportation, and air transportation is required.

2. Means of calculating long-range volume of highway transportation.

The total volume of highway transportation has generally increased year after year. But what has been the law governing the increase in the volume of vehicular traffic (motorcars, tractors, and nonmotorized vehicles)? Has there been any tendency for the volume of certain kinds of vehicular traffic to decline? What is the interrelationship among the growth in traffic volume, development of the national economy, and rise in the people's standard of living? What means may be used to figure out fairly accurately the long-range volume of traffic? All this requires investigation and study.

3. Investigation of highway traffic.

An investigation of traffic mostly entails investigation of volume of traffic and vehicle speeds. Volume of traffic and speeds of vehicles are the two fundamental pieces of data required to formulate highway plans and to design highways. In studying both the laws governing changes in the volume of traffic and the means of calculating long-range volume of transportation, investigative data on volume of traffic that has been systematically collected over a long period of time is needed. Surveys of traffic volume may be of the intermittent 1 to 3 days a month variety or of the continuous variety that are conducted continuously all year long. The former variety was conducted on many highways during the 1950's, and the latter variety was begun last year when the Ministry of Transportation organized each province, municipality, and prefecture to carry out national road network planning. In order to analyze and study the laws governing changes in the volume of traffic so as to be able to provide reliable data for highway planning and design, reliance should be placed primarily on data obtained from continuous surveys of traffic volume at various sections of road. One year is not sufficient for a continuous survey, and it is hoped that once a year's survey has been done for planning purposes that regular survey work will continue, for which support from the leaders concerned will be required.

4. Investigation and study of highway traffic capacity.

The survey of technical standards for the modification of highway projects for which various provinces and municipalities were twice organized by the Highway Bureau of the Ministry of Transportation during 1965 and 1966, and from 1977 to 1979 contained a survey of traffic capacity. This work must be done systematically and thoroughly, and it is recommended that it be continued with the support of the Highway Bureau of the Ministry of Transportation to help highway planning and design, and in order to provide accurate data to solve the problem of cross traffic on highways with mixed kinds of traffic.

During the past 10 years, some highway designs have not been well surveyed or studied, and even though transportation data was lacking, decisions were made about highway roadbeds, the width of highways, and estimated speed of vehicles. After they were built, they were found to be inadequate for the long-range traffic volume, or apparent highway standards were too high, and in some cases congestion and blockage began to occur in only a few years, requiring widening of the highways. These two circumstances created waste. This kind of subjective workstyle must be overcome, and things must be done with a scientific attitude. Specifically, no matter whether in planning or design, figures are needed as data. When this has been done, then investigation and study of the four points given above can be undertaken; otherwise one can only act subjectively.

IV. In the Process of Modernizing Highways, Traffic Control Must be Intensified

The orderliness of traffic on highways is currently not very ideal. One of the reasons for congestion or blockage and numerous accidents on some stretches of highways is deficiencies in the highways themselves. Disorderly traffic cannot be ignored, either. With further intensification of traffic control and propaganda, the traffic capacity of highways can be increased and the accident rate lowered, or it may be that some stretches of highway that were to be rebuilt may not need to be rebuilt for the moment. Viewed in long-range terms, with the modernization of highways will come a need for corresponding traffic control regulations to meet the needs of traffic, as well as traffic control equipment and traffic safety equipment. Only then will highways give good service for highway transportation.

9432
CSO: 4006

BUILDING OF QINGHAI-XIZANG RAILWAY UNDERWAY

Beijing TIEDAO ZHISHI [RAILWAY KNOWLEDGE] in Chinese No 3, Nov 80 pp 29-30

[Article by Wang Mingkui [3769 2494 1145]: "Running Trains to Golmud"]

[Text] In order to build up the western borderland of the motherland, the Central Party Committee decided to construct a rail line through to Xizang at the same time that the Lan[zhou)-to-Xin(jiang) railway was under construction. This was the Qing(hai)-(Xi)zang rail line, whose construction plan was subsequently approved. This is a major construction project which was shown profound concern and given great emphasis by Chairman Mao and Zhou Enlai, while they were still living.

The Qing-Zang railway is a major trunkline connecting our country's interior with the borderlands. It is planned to extend from Xining in Qinghai Province through Gangca, Delingha, Golmud, Naij Tal, Tuotuohe, Amdo, Nagqu, Damxung, Lhunzhub and Maizhokunggar to Lhasa, the capital city of Xizang Autonomous Region, for a total distance of 2,049 km. This rail line traverses the Qaidam Basin, vaults the Kunlun, Fenghuo, Tanggulashan and Nyainqentanglha mountain ranges, and stretches across the Golmud, Qumar, Tongtian, Tuotuo and Lhasa rivers. The greatest portion of the railway is situated on the Qing-Zang Plateau, "the roof of the world"; there is one section of 930-plus km. whose elevation is 4-5000 m. above sea level, which makes it the highest railway in the world. The geologic and climatic conditions to be encountered in the construction of this railway are extremely varied. The southern portion of the Qaidam Basin is crisscrossed with interconnected areas of desert, salt lakes, alinized soils and gobi sands. In the plateau region, the permafrost extends for more than 570 km.

Between Nagqu and Damxung, the intensity of earthquakes is, on the whole, grade 9 to grade 10. The climate in most regions along the line is bitterly cold and changeable with much wind and little rain. The air is thin to the extent that in some areas there is serious oxygen deficiency.

Based on planning arrangements, it was decided that the Qing-Zang railway would be constructed in sections. First to be built was to be the section between Xining and Golmud, which is 834.5 km. long and which has been open since July 1979. Of this section, that part between Xining and Ketu, 122 km. in length, was originally to have been constructed by the Northwest Railway Engineering Bureau, that part between Ketu and Hairag, 55 km. in length, by the Ministry of Railways' First Engineering Bureau, while responsibility for construction of that part between Hairag and Golmud, 653.5 km. in length, went to the Railway Engineer Corps.

There are many difficulties associated with building this section of the railway and the project is an extremely formidable one. The elevation of this section is from 2700-3700 m. above sea level, atmospheric pressure is low, and oxygen deficiency is roughly 30 percent. Moreover it is severely cold and windy, with wind velocity of grade 8 or above on 40 to 70 days out of the year. A particular problem is the aridity which causes insufficiency of water resources. Although there are a few small rivers in this area the water is not potable nor usable in construction because of the presence of excessive amounts of saline-alkaline and other chemical elements. Thus water is of utmost value. In order to resolve the water use problem, construction units organized special water truck units which each day speed into the gobi and travel to far-flung locations in order to deliver fresh water to construction sites and barracks. In more than three years of construction work, the water truck units drove over rough and bumpy makeshift roads for a total of more than 1.55 million km., a distance equivalent to 8 times around the world. They transported more than 2.682 million tons of water, an amount equal to an artificial lake with an area of 1.3 square meters and a depth of 2 meters.

This section of the line is situated in the southeast part of the Qaidam Basin and passes through geologic areas where there are deserts, swamps, salt lakes and hyperformed [chao zhong 6389 6850] saline-alkaline soils. Especially great hardships are imposed on the railroad construction where the line passes through the Chaerhan Salt Lake. Chaerhan Salt Lake is the largest salt lake in our country and is the largest inland salt lake in the world. It is 168 km. in length from east to west, and 20-40 km. wide from south to north, with a total area of 5856 sq. km. The amount of rock salt contained in the lake far exceeds that in the other salt lakes in Qaidam. Although the salt lake is called a "lake," in actuality it is not a vast expanse of blue, undulating ocean. Conversely, it has a hard brown shell about 80 cm. thick. Below this hard shell is a layer of rock salt around 10-20 m. thick. Because of this, it looks from above as though it is a boundless expanse of level ground and only in the tiny salt ponds, gullies and depressions is there any clear lake water to be found.

Only in the USSR and USA has a railway been built over a salt lake. The USSR merely constructed a short, special-use line in a salt mining district. The salt lake which the USA's railway traverses has no water in it. Prior to 1975, a trestle bridge was used by trains crossing the lake. Since 1975, a gravel roadbed has been used for this purpose. The geologic structure of the Chaerhan Salt Lake is complex. Where the railway crosses on the outer edge of the northern side, there is a section called the saturated powdered sand soaker liquefaction zone, where everything within 10 m. of the firm land surface is powdery grains of sand where due to a long period of immersion in salt water the texture has softened, its load-bearing capacity has been greatly weakened, and it is quite difficult to imagine building a railway on top of it.

After many years of comparative observations and research by such organizations as the Chinese Academy of Sciences, Ministry of Railways' Scientific Research Academy and Railway Engineer Corps, [illegible] the roadbed in soft ground areas through utilization of a method where the soft layer is pushed away, and the area back-filled with pebbles and gravel and pilings. After 3 months of difficult struggle, the site was filled in with several tens of thousands of cubic meters of course granulated [illegible] sand pilings were sunk. The total amount of drilling [illegible] of tunneling through 17 Mt. Qomolangmas. Once the [illegible] involving densely packed sand pilings was completed, a solid roadbed has been built on top of the sponge-like powdery sand stratum, and 32 km of railway has been laid on Chaerhan Salt Lake. This is an accomplishment rare in the world's history of railway construction.

Although this section of the line between Xining and Golmud accounts for only one-third of the entire Qing-Zang railway, its completion is of utmost significance for Qinghai Province. In the past, Qinghai's vast gobis and marshes, interconnecting salt lakes and rivers were minimally suited for transportation and constituted serious barriers to trade routes. The people could rely only on yaks, camels, wagons and animal skin rafts for transportation. Since the liberation, major highway construction has been carried out, and with construction of main trunk routes such as those between Qinghai and Xizang, Xinjiang, and Sichuan, and from Dunhuang to Golmud and Caka to Mangnai, there has been improvement in the "route barrier" situation.

After the Lanzhou-Qinghai railway was opened to traffic, the Xining-Golmud section of the Qinghai-Xizang railway was opened, giving Qinghai Province more than 900 km. of railway within its boundary and greatly advancing communications between those inside and those outside the province. This also promoted flourishing development in industrial and agricultural building.

The area of Qaidam Basin, located on the northwest side of the Xining-Golmud section of the Qing-Zang railway, is greater than that of Jiangsu Province and it has abundant mineral deposits below ground. The 32 salt lakes in the basin have spawned 24 salt lakes. Since liberation, our geologic scientific researchers have penetrated into the gobis, crossed the deserts, conquered every kind of hardship, undertaken more than 20 years of exploration, and have made a preliminary finding that there are more than 60 billion tons of rock salt contained in the area. This would be enough material to construct a "salt bridge" 6 m. thick and 12 m. wide between the earth and the moon. In addition to the largest salt lake, Chaerhan, there is another, snow-white Caka Salt Lake, which has been mined since the 28th year of Qianlong (1763). At present it remains one of the famous large-scale mineral deposits in our country. The building of the Qing-Zang railway has provided favorable conditions for going a step further in opening up the mineral deposits here.

Xining City and Golmud City, the starting point and terminus of the Xining-Golmud section, are two major highway centers in Qinghai Province. Xining, the provincial capital of Qinghai, is situated on the south bank of the middle reaches of the Huang Shui (river), and functions as the converging point of the Lanzhou-Qinghai and Qing-Zang railways as well as the Qing-Zang Highway. It strategically controls the doorway to the eastern part of the Qinghai Plateau and is a center for Qinghai Province's politics, economics, culture and communications. Since liberation, there has been a great development of economic building in various industries such as steel, machinery, electronics, chemicals, cotton and wool textiles, animal by-products, medicines and foodstuffs. Of these the best-known are the milk products and woolen textile industries.

Golmud City is a new city built upon the sands of the gobi. It is located beneath the Kunlun Mountains in the southeast part of the Qaidam Basin, known locally as the motherland's "cornucopia." In the early days following liberation, this was still the pastureland of the Kazakhs. In the Yushui River and Golmud River flood-land district west of the city, there are tall reeds and thickly grown red willows everywhere. Wild animals come and go, and wild scenery fills the eye. After construction of the Qing-Zang highway was completed in 1954, it gradually took shape as a town. In the early period of town-building, there was not one road here, nor were there any buildings. Official organizations, trading corporations and schools were all housed in tents. The people called this "tent city" and the population amounted to only a few hundred. In step with the westward progress of the Qing-Zang highway and the construction of the Qing-Zang railway, this area has gradually flourished and now has become a new city of more than 100,000, a broad expanse of orderly homes has been built, and there are broad roadways lying in the shade of green trees.

Golmud serves as the point of convergence of the Qing-Zang, Qinghai-Xinjiang, and Dunhuang-Golmud highways and is an important location for communications going south to Xizang, north to the Hexi corridor, east to Xining, and west to Xinjiang. Each day at dawn trucks of the transportation units, fully loaded with military and civilian supplies, begin their trips along the various highway routes. Routinely, there are various kinds of transport vehicles all grouped together and totalling more than 10,000, giving rise to the name "truck city" for Golmud.

The industry of Golmud grew entirely out of nothing. Owing to the increase of vehicles, the initial building involved construction of vehicle repair shops. This is a livestock industry area for the Mongol, Tibetan, and Kazakh peoples. Since liberation, large-scale farms have been constructed, as well as leather and wool processing plants and livestock machinery plants. Moreover, there has been a gradual appearance of such industries as electric power, machinery, iron smelting, brick and tile, leather, sugar and foodstuffs. Not long ago, the Golmud hydroelectric power station formally went into operation and began to generate electric power, driven by water from melting snow in the Kunlun Mountains. It is the largest hydroelectric power station in Qinghai Province at the present time, with installed capacity of 9000 kw. This bright pearl of the gobi makes the city of Golmud even more bright and colorful. Once the construction of the Qing-Zang railway reaches Golmud, it too will bring about a development which grows greater every day.

9420
CSO: 4006

TRANSPORTATION

BRIEFS

GUANGDONG SHIPPING--Since December 1980, the Guangdong-Hong Kong-Macao Shipping Company has added nine more vessels including cargo freighters and towboats to its fleet. These boats sail between Zhaoqing and Hong Kong, Jiangmen and Hong Kong, Shiqi and Hong Kong, Guangzhou and Hong Kong and between Guangzhou and Macao, strengthening the transportation links for foreign trade. [Guangzhou Guangdong Provincial Service in Mandarin 1120 GMT 10 Mar 81 HK]

CSO: 4006

GENERAL

BRIEFS

NATIONAL INSURANCE COMPANY CONFERENCE--Beijing, 6 Mar (XINHUA)--The Chinese People's Insurance Company held a national insurance work conference from 21 February to 3 March in Beijing. The conference summed up the 1980 work and made a work plan for 1981. It pointed out the necessity to further develop insurance work in the course of economic readjustment. As pointed out at the conference, the total amount of property insurance by the end of last year had reached more than 130 billion yuan. This insurance covered property of enterprises in over 300 cities and counties. There were 9 provinces and municipalities with large amounts of insurance, each with premium receipts over 10 million yuan at the end of last year. [Beijing XINHUA Domestic Service in Chinese 1147 GMT 6 Mar 81]

YUNNAN ECONOMIC CONFERENCE--On 7 March, the Yunnan Economic Committee held a conference on production. The participants stated that it is necessary to implement the principle of readjustment, steadily do various jobs well and seriously analyze and study the situation of production in January and February. They discovered that the trends of development are good. Production in January was maintained at the same level over the corresponding period of last year, while the output level in February increased by 4.3 percent over January. During these 2 months, output of light industry increased by 7.1 percent over the corresponding period of last year. However, the level of total production throughout the province decreased over the corresponding period of last year. If this situation is not rapidly changed, it is bound to affect the smooth fulfillment of the economic readjustment throughout the province this year. It is necessary to regard the light and textile industrial output as the center of industrial and communications production this year and strengthen investigation of the markets. [HK161512 Kunming Yunnan Provincial Service in Mandarin 1100 GMT 10 Mar 81]

CSO: 4006

END

END OF
FICHE
DATE FILMED

26 March 81